THE NEW ENGLAND CONSERVATORY COURSE IN GENERAL SIGHT READING

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K.P.

THE

NEW ENGLAND CONSERVATORY COURSE

IN

GENERAL SIGHT READING

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THE NEW ENGLAND CONSERVATORY OF MUSIC.

HUNTINGTON AVENUE. BOSTON, MASS.

PREFACE.

The most encouraging sign in connection with the growth of music in the United States is the increasing desire on the part of those who study music to begin at the proper point and to lay a secure foundation for future musical achievements. Without question the corner-stone of that foundation is the ability to read music at sight. The term "reading at sight" applies primarily to the ability to know the sounds of a musical composition by merely looking at the notes and secondarily to the ability to correctly produce those sounds with the voice or instrument without previous study. To enable students to acquire this ability in the shortest possible time this work has been prepared combining the use of both voice and instrument. This method, it is believed, appears for the first time in this work and it appeals equally to those who aspire to become Vocalists or Instrumentalists.

To all earnest students of either class these pages are committed in the full confidence that those who faithfully perform each task in its proper order will find at the end that they have laid well the foundation of true musicianship.

SAMUEL W. COLE,
SUPT. SIGHT READING DEPARTMENT.

NEW ENGLAND CONSERVATORY OF MUSIC,
BOSTON, MASS., SEPT. 1897.

INDEX.

THE NEW ENGLAND CONSERVATORY COURSE IN Solfeggio, Ear-Training and General Sight-Reading.

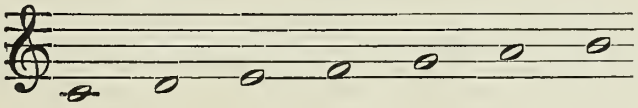
LESSON I.

Solfeggio is the study of tones. Ear-training is the development of the power to produce any tone at will and to recognize the same when heard. Sight-reading is the ability to hear, mentally, the tones of a musical composition, as they are represented in notes on the staff, by looking at them, as one reads a book and without appealing to the ear. It is the province of Solfeggio and Ear-training to make Sight-readers. Sight-reading finds its practical application, for the vocalist, in sight-singing, for the instrumentalist, in sight-playing.

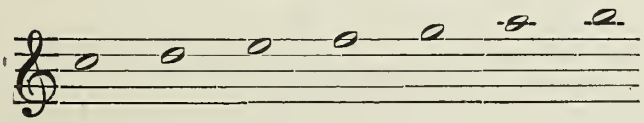
Tones may be presented to the mind, through the eye by means of the notes on the staff or through the musical instrument with which one is most familiar, as when one looks at the key-board of a piano or organ and imagines the tones which may be there produced.

The English speaking world has adopted at least two sets of names for tones: the letters C, D, E, F, G, A, B, and the numbers 1, 2, 3, 4, 5, 6, 7. The letters tend to individualize the tones: the numbers to relate them. It is the collection of seven tones called the major scale, and not any single tone thereof, from which has arisen the vast whole of music as known to the civilized world; therefore the numbers, which represent the relation of tones, (the letters represent individual tones without regard to their relation to other tones), are most important and far-reaching in their usefulness to the musician.

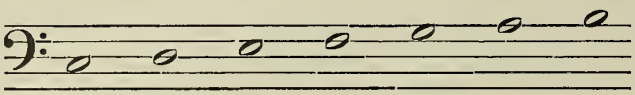
Tones are also definitely named with reference to their individuality and the depth or acuteness of their pitch as follows: Beginning at the tone called middle-C of the piano-forte, that tone and the six tones immediately above it constitute the one-lined group and are marked thus:

Fig. 1.  c, d, e, f, g, a, b.

The seven next higher notes constitute the two-lined group and are marked thus:

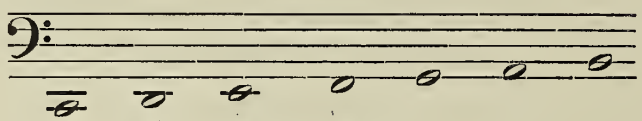
Fig. 2.  c, d, e, f, g, a, b.

and so on each higher group of tones adding a line thus: the three-lined group, the four-lined group, etc. The seven tones immediately below middle-C constitute the small group and are marked thus:

FIG. 3.  or c, d, e, f, g, a, b.

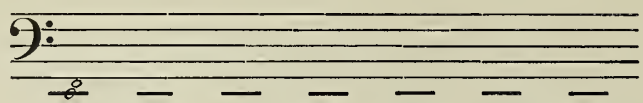
c, d, e, f, g, a, b.

The seven next lower tones constitute the great group and are marked thus:

FIG. 4. 

C, D, E, F, G, A, B.

The seven next lower tones constitute the contra group and are marked thus:

FIG. 5. 

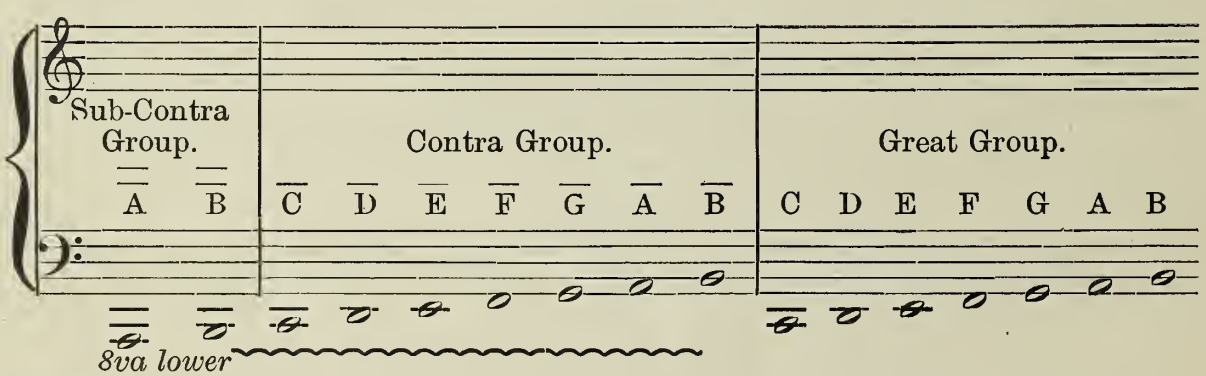
C, D, E, F, G, A, B.

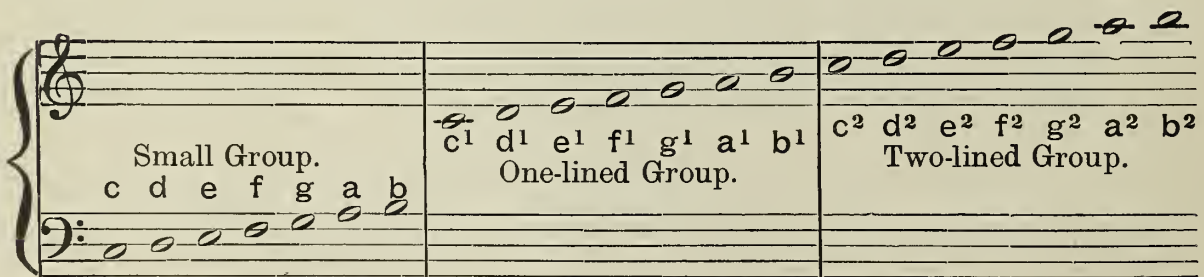
The seven next lower tones constitute the sub-contra group and are marked thus:

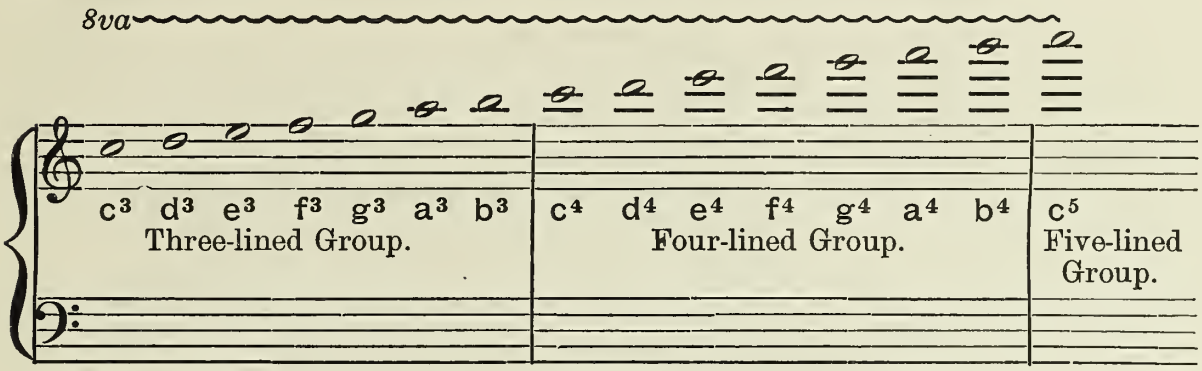
C, D, E, F, G, A, B.

The following example represents these tones as they appear on the staff. Study them at the staff and at the key-board until each tone can be readily written or played.

FIG. 6.





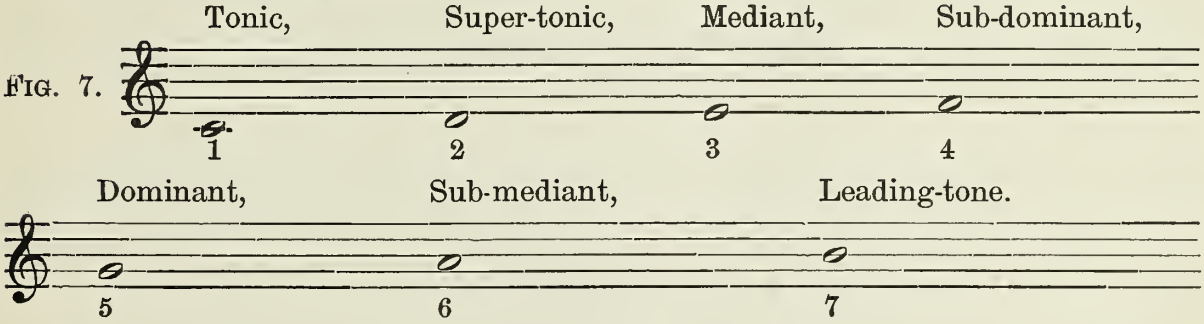


LESSON II.

The seven tones of the scale have also their harmonic names, as follows:

One, the Key-note or Tonic.
Two, the Super-tonic.
Three, the Mediant, (midway between Tonic and Dominant).
Four, the Sub-dominant.
Five, the Dominant, (dominating tone).
Six, the Sub-mediant, (midway between Sub-dominant and Tonic).
Seven, the Leading-tone. Thus:

FIG. 7.



Memorize these names in connection with the numbers so that the harmonic name can be instantly given when the number of any tone is mentioned.

The tones of the scale have also certain natural tendencies or characteristics which are divided into two classes: Active tones and inactive tones. 1, 3, and 5 are the inactive tones; 2, 4, 6, and 7 are the active tones. To remain at rest is the characteristic of the inactive tones, to move into a condition of rest is the characteristic of the active tones. The following example is a clear illustration of these characteristics.

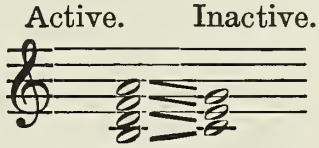


FIG. 8.

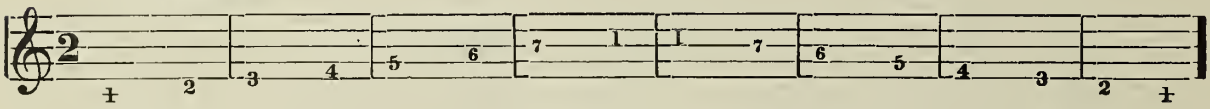
Play these tones on the piano and notice how naturally 7 moves to 1; 2 to 1; 4 to 3 and 6 to 5. From this it appears that 1, 3, 5 are the tones which mark or establish the key. The ability to produce the seven tones of the major scale with the voice in any order whatsoever, (the key having been established), and to recognize them when heard, marks the accomplishment of the first requirement in genuine musicianship. To gain this point the earnest student should bend every energy.

LESSON III.

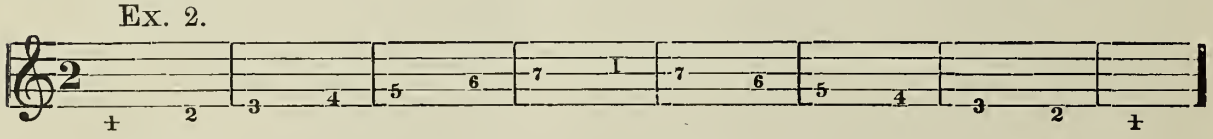
Sing the tones represented by the following series of numbers until each series can be correctly and rapidly sung. The practice of these exercises should be first done without regard to time, but when certainty of intonation is acquired they should be practiced with a metronome thus:—where there are two or more numbers in a measure sing one sound to each tick; where there is but one number in a measure sustain the sound thus represented through two or more ticks according to the form of measure indicated by the large figure at the beginning of the exercise called the time signature.

Use the piano only in getting the pitch of the first sound and for testing a tone now and then by striking the same immediately after it has been sung. When the exercise is written in any key except C-major it should be spelled, before it is sung, by speaking aloud the name of the key on the piano which is represented by each number of the exercise. This practice should be unremittingly continued until the tone of any number in any major key can be instantly named. After an exercise has been learned with the voice, it should be practiced on the piano in time with the metronome, *but in no case should this practice precede the singing.*

EXERCISE 1.



EX. 2.



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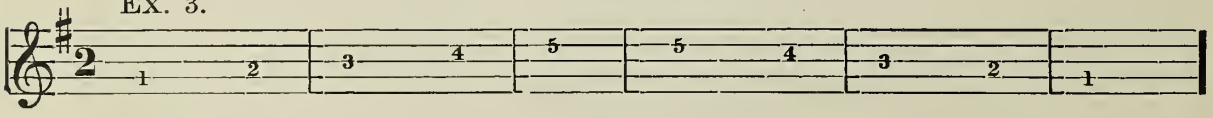

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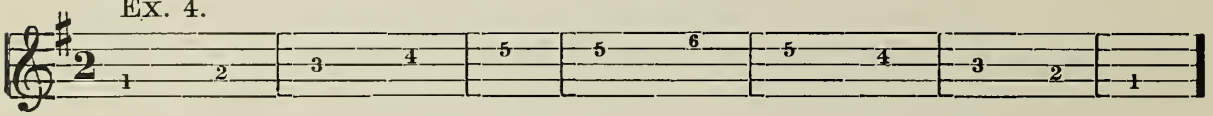

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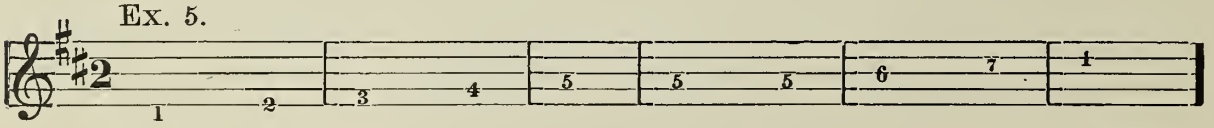

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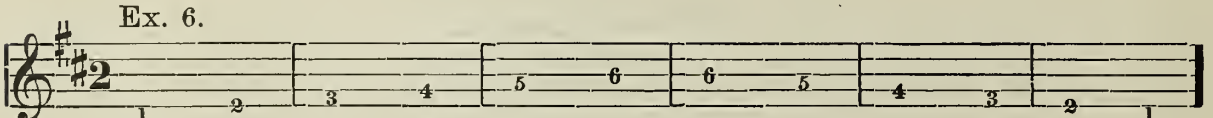

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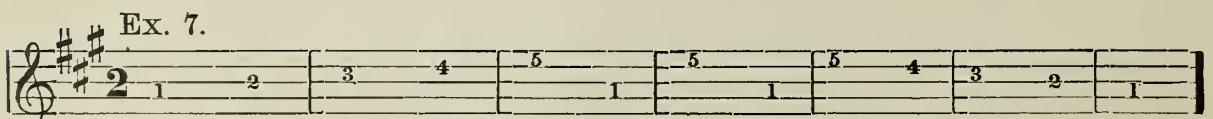

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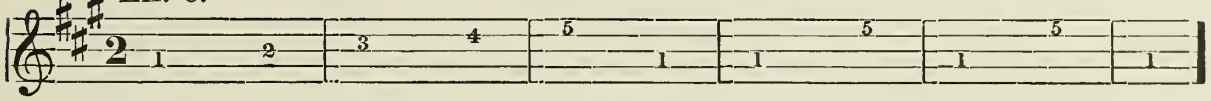

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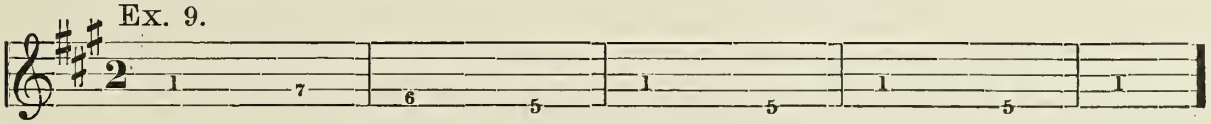
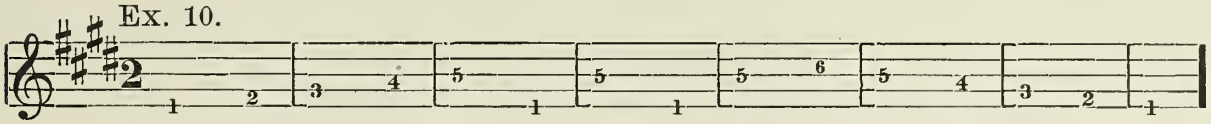
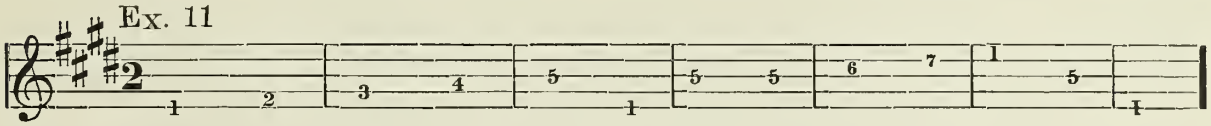


Ex. 10.



Ex. 11



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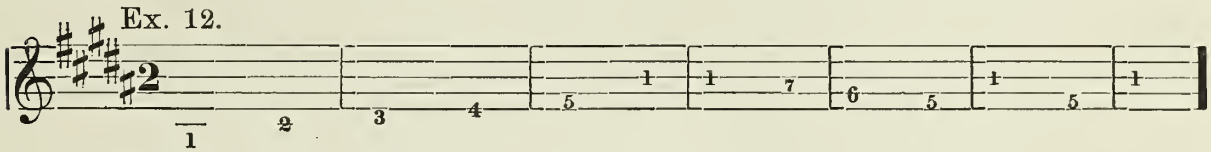

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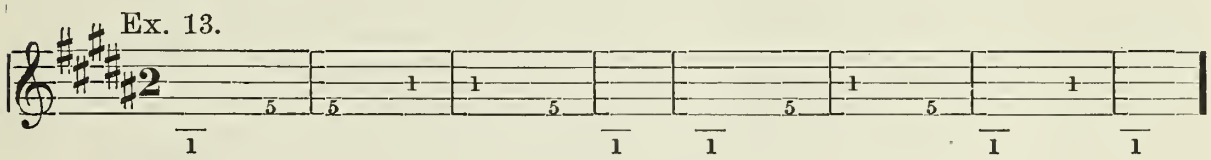

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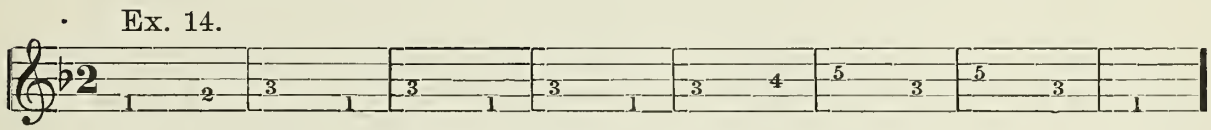
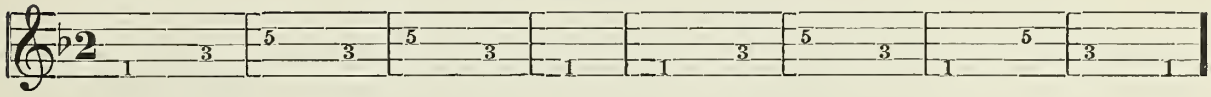


LESSON IV.

Ex. 15.



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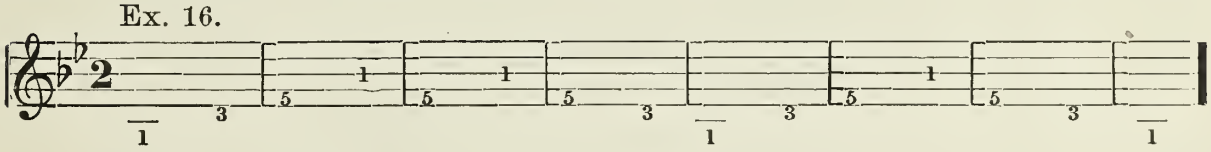

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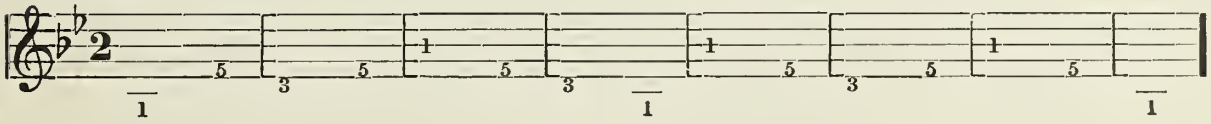

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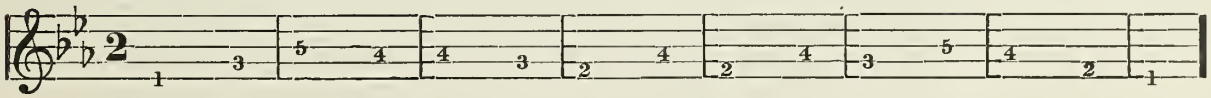

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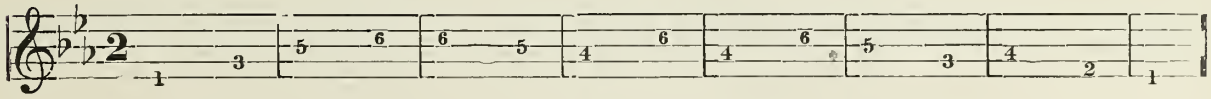

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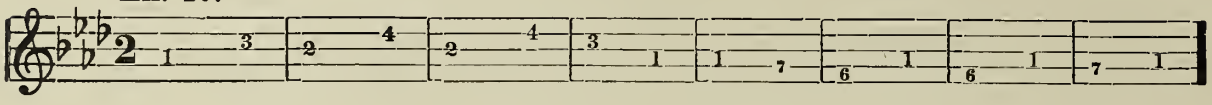

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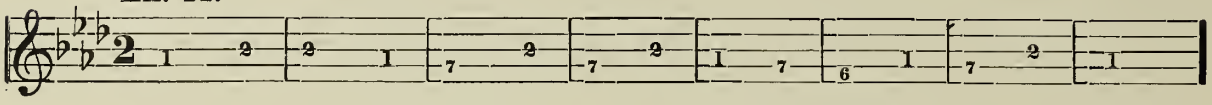

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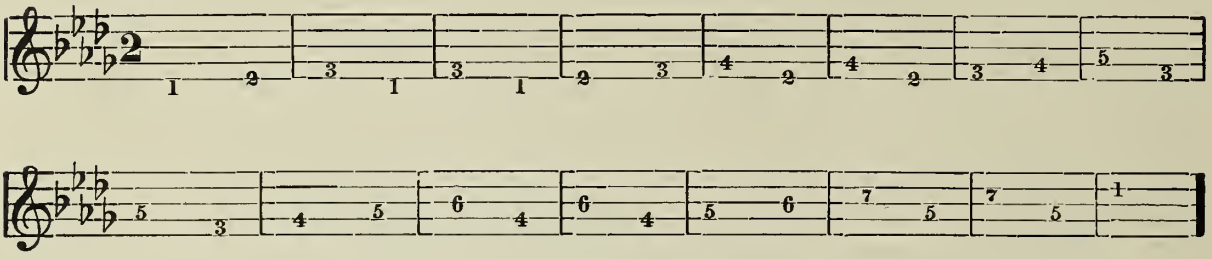

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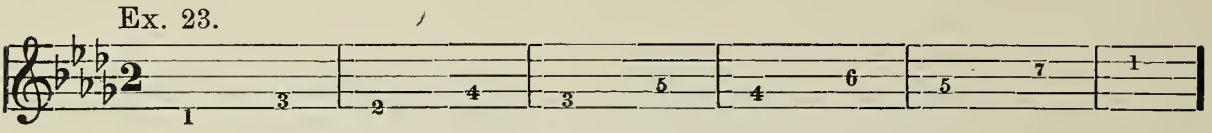
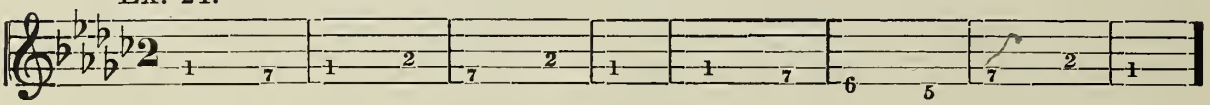


LESSON V.

Ex. 24.



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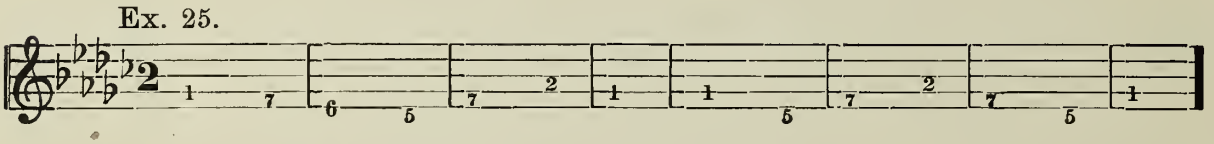

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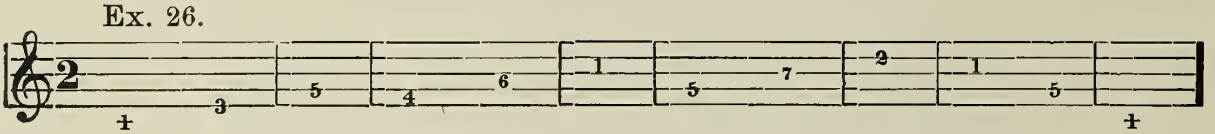

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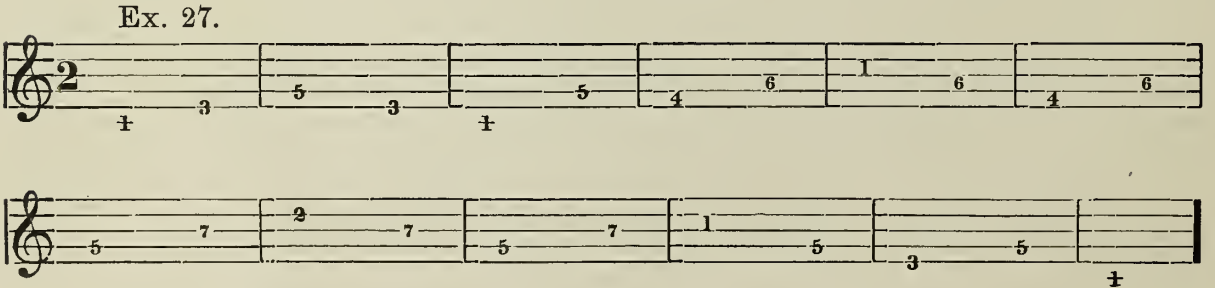
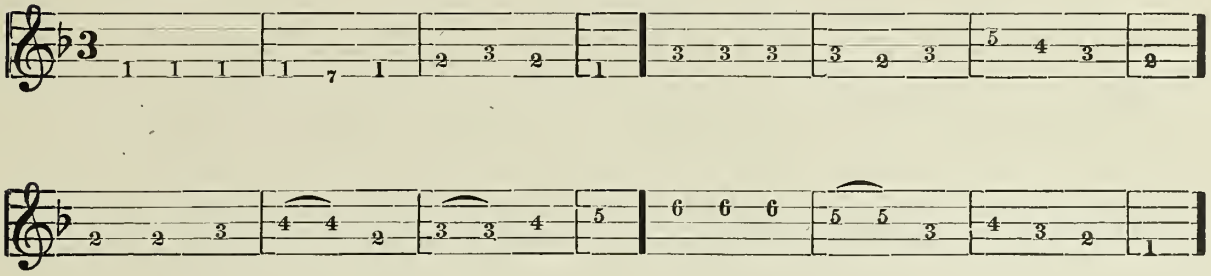


Chorals.

Ex. 28.



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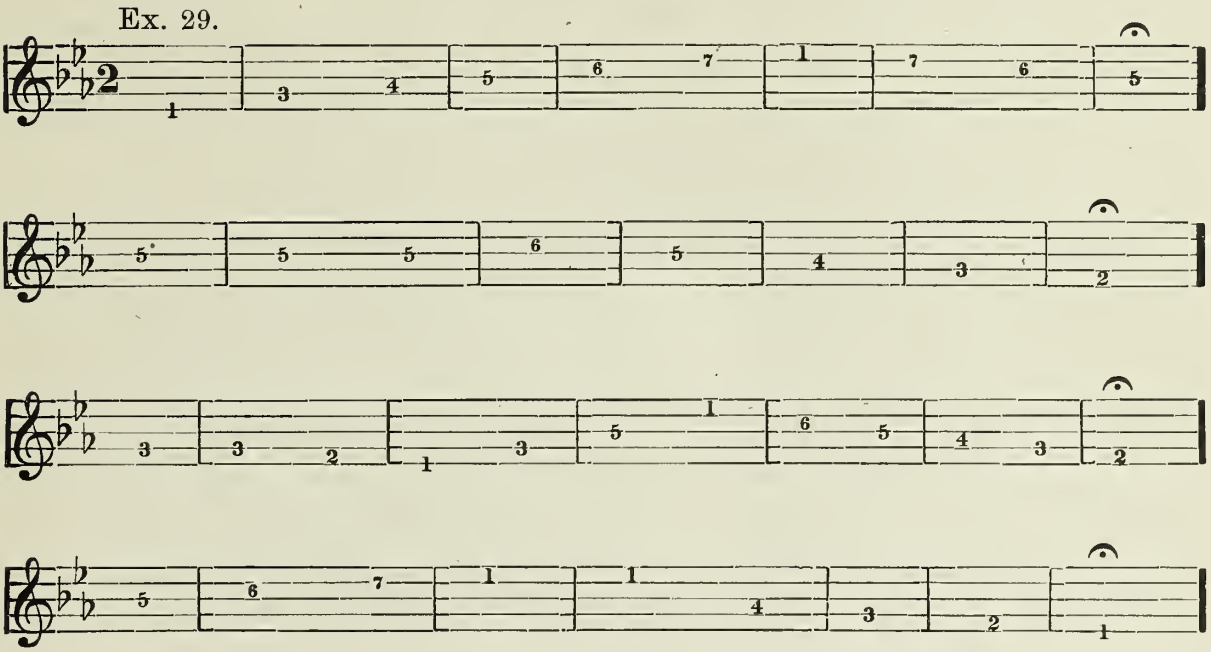
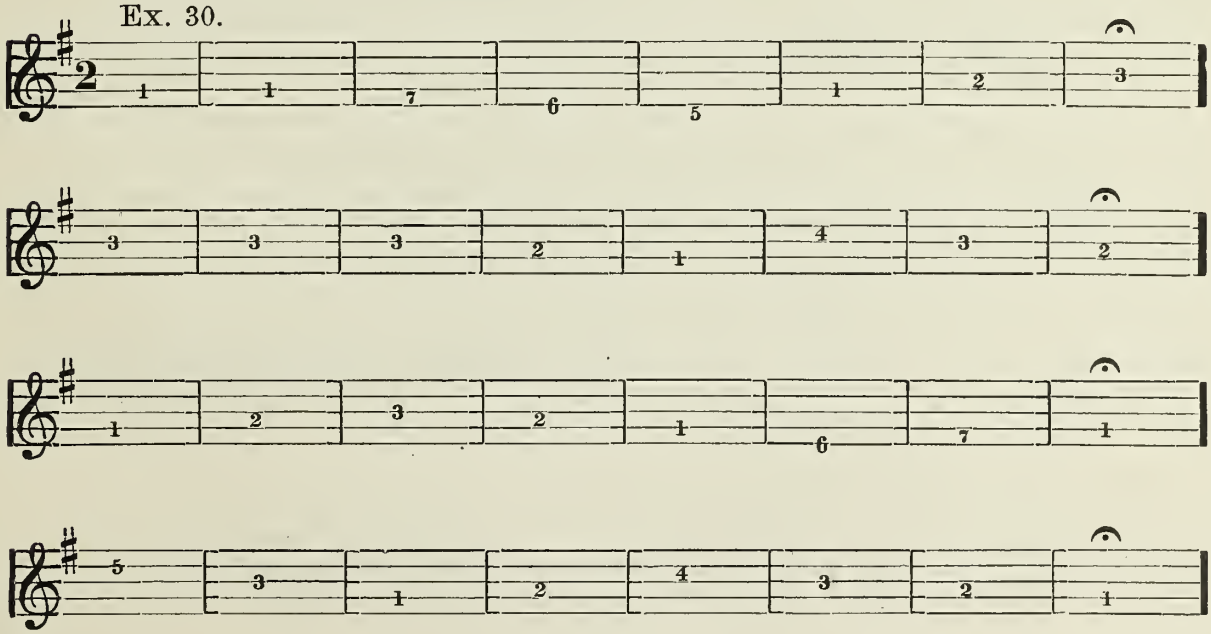


Ex. 30.



LESSON VI.

Rhythm.

Rhythm is the systematic grouping of sounds with regard to their duration. This grouping is marked by the difference in force with which each sound is produced called accent. By means of accents these groups are made of equal duration which duration is called time. When expressed in notes these groups are called measures. As the musical unit is the scale so the rhythmical unit is the contrast between two or three accents or the simple form of measure. The strong accent should mark the beginning of a measure. The beat, or any note which represents it, is the time unit.

There are but two varieties of simple measure in common use: duple and triple, called also two-part measure and three-part measure. See Figures 8, 9, 10. All larger forms of measure are compounded from these and have as many strong accents as there are simple measures used in constructing the larger measure; thus: four-part measure is compounded from two, duple measures and has an accent on the first and third beat. See Figure 11. Six-part measure is compounded from two triple measures and has an accent on the first and fourth beats, etc. See Figure 12. Thus all forms of measure are divided into two classes, simple and compound.

The upper figure of the time-signature always indicates whether the measure is simple or compound. The lower figure indicates the kind of note which represents *one beat* and the composer can select any kind he chooses but, having selected, he must make all the measures of his composition correspond *arithmetically* to this standard. Thus:

Fig. 8. 

Fig. 9. 

Fig. 10. 

Fig. 11. 

Fig. 12. 

Fig. 13. 

Fig. 14. 

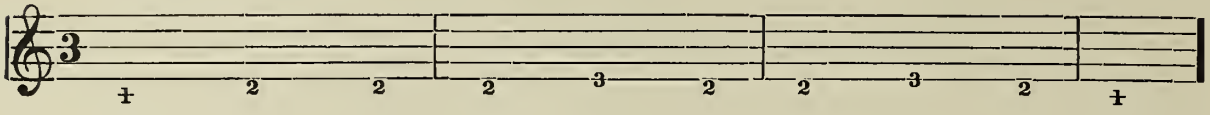
In case the voice or instrument is silent for a part of a measure or measures, that silence must be expressed in rests which shall sustain the value established by the time signature.

In case an entire measure is silent, then the whole, or measure rest, 𝄻 may express that silence regardless of the time signature.

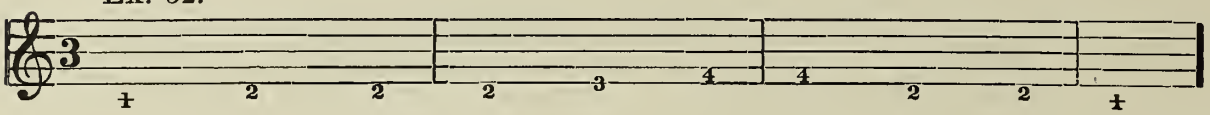
Study Ex's. 147, 148, Solfeggio Book No. 2 as follows: Say the numbers in strict time with the metronome first at ♩ = 60 but increasing the speed, as practice gives facility, until a perfectly clear and smooth performance can be given with the metronome at ♩ = 144. After this degree of facility is attained they may be sung with the metronome at ♩ = 80. Study Ex's. 149 to 156 in the same manner. Study Ex's. 1 to 30 with special reference to the duple rhythm which they illustrate. Accent slightly the first sound in each measure.

Ex's. 31 to 43; 53 to 61, etc. illustrate triple rhythm in connection with a still closer study of the individual tones of the major scale. Study these exercises first, with reference to correct intonation, according to the directions given for the study of Ex's. 1 to 30, (See Lesson III), then study them with special regard to the rhythm, accenting slightly the first note in each measure.

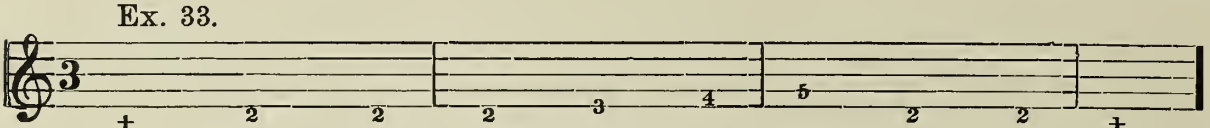
Ex. 31.



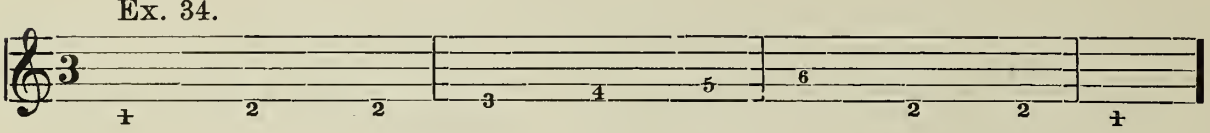
Ex. 32.



Ex. 33.



Ex. 34.



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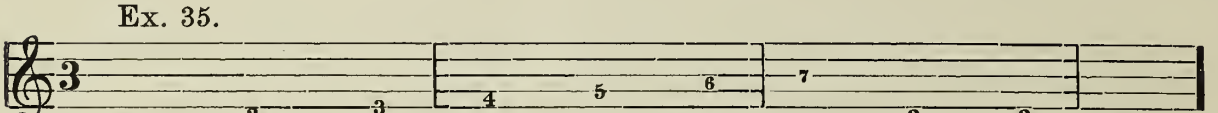

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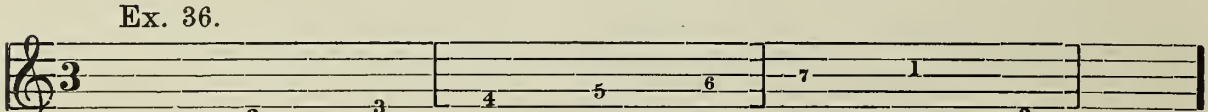

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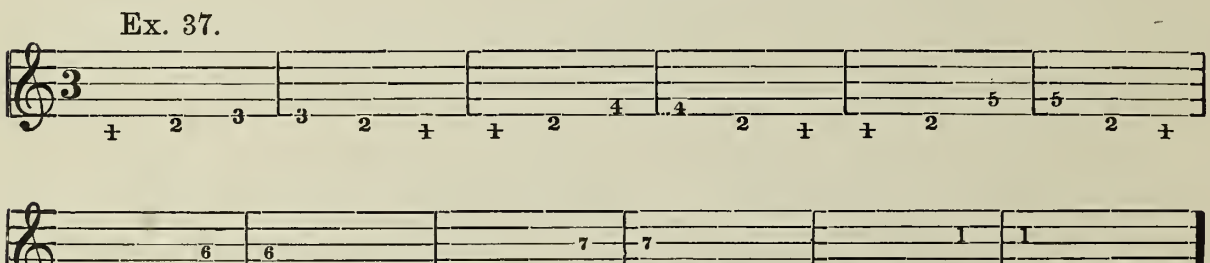

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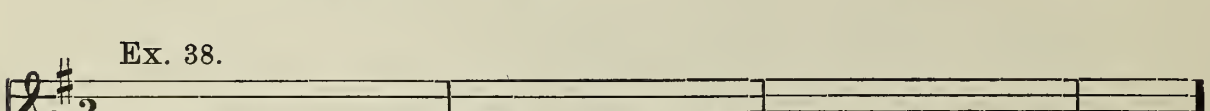

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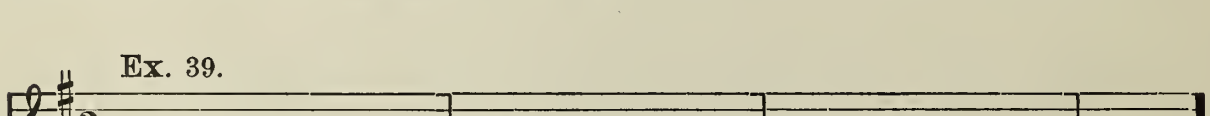

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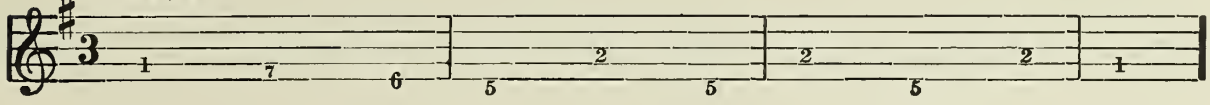

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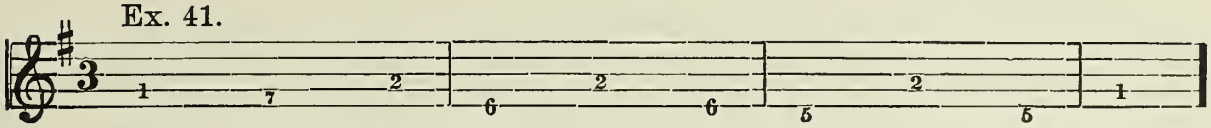

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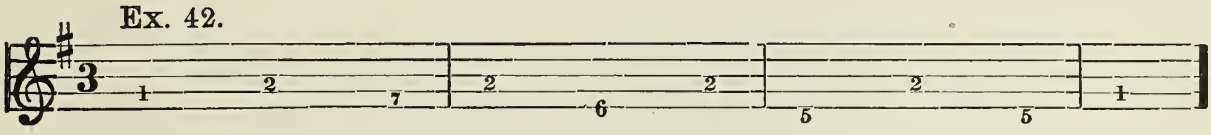

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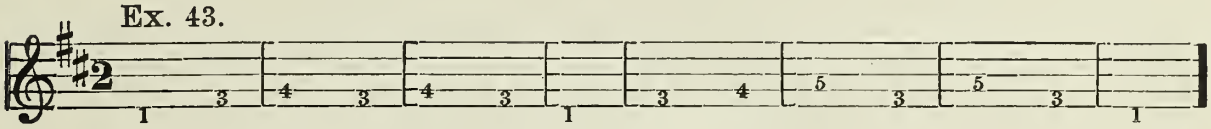

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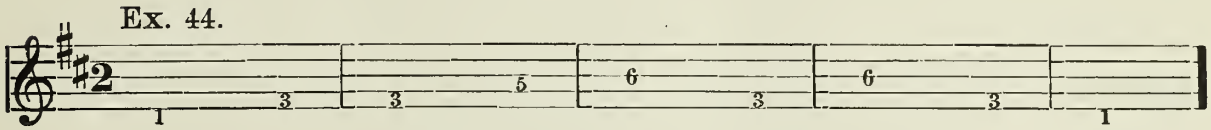

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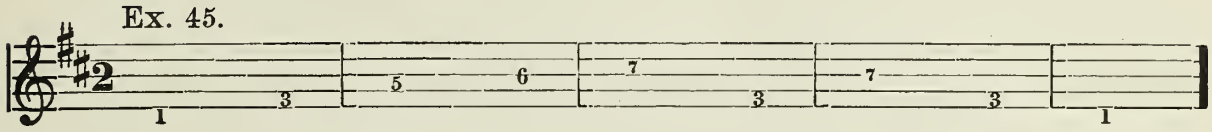

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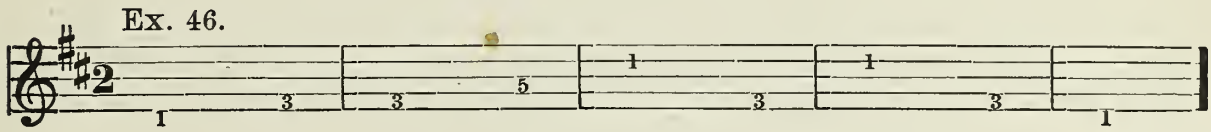

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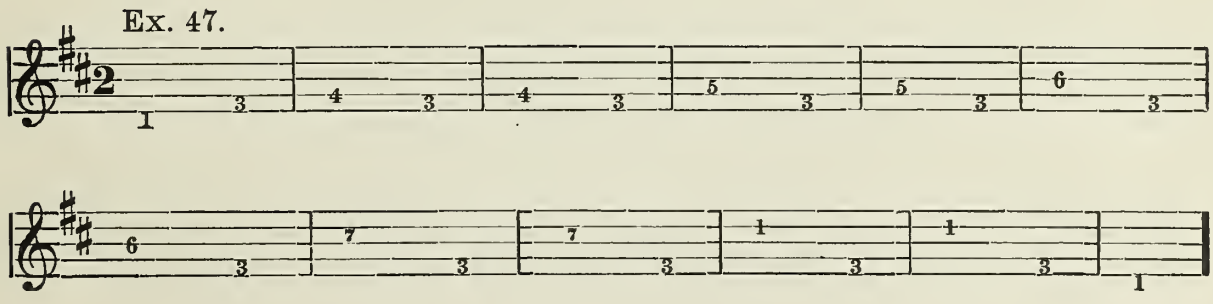

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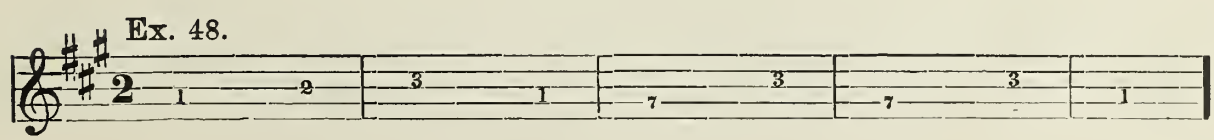

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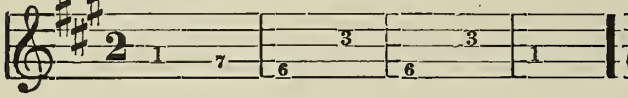

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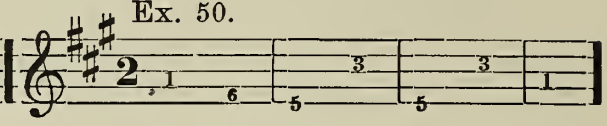

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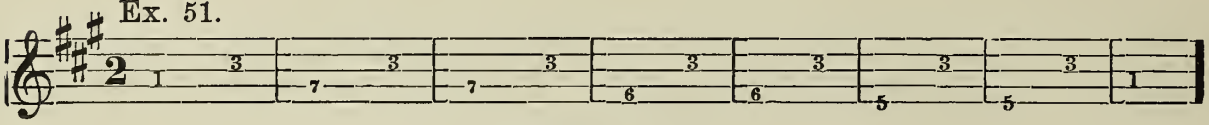
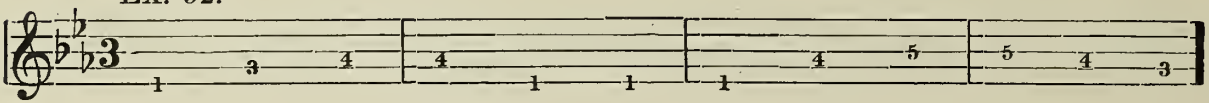


LESSON VII.

Ex. 52.



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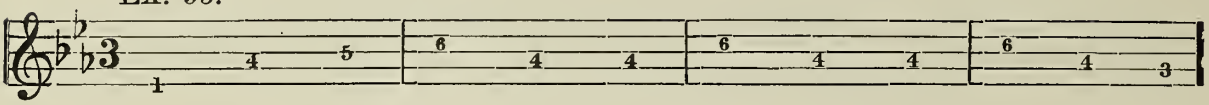

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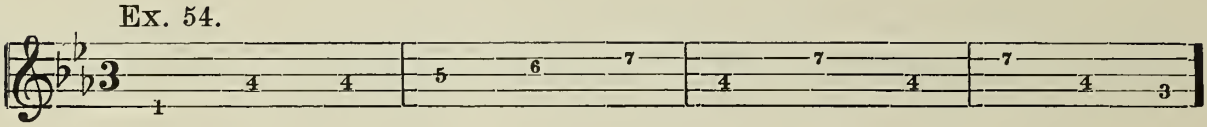

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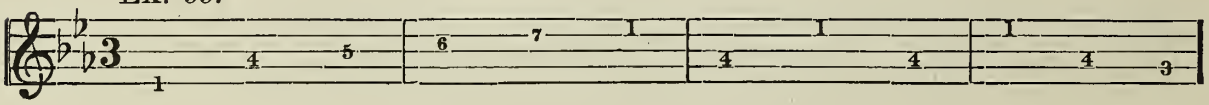

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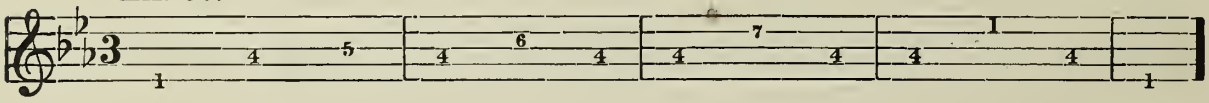

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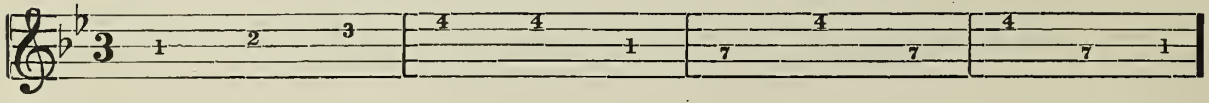

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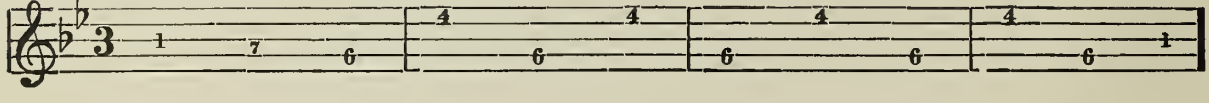

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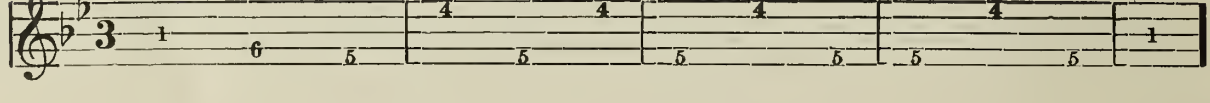

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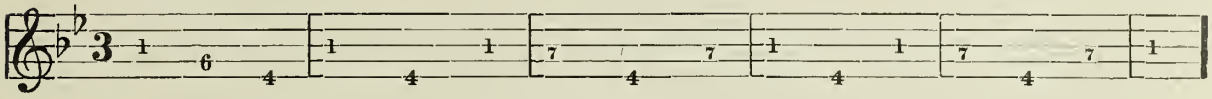

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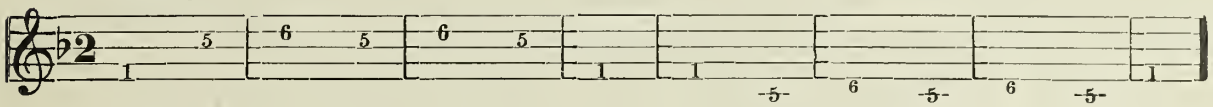

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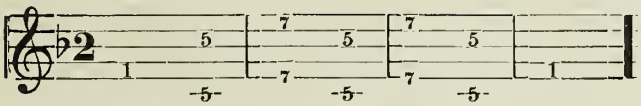

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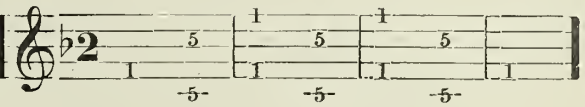

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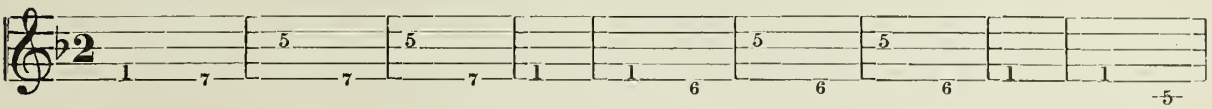

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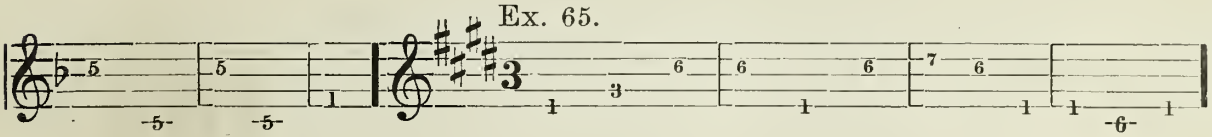

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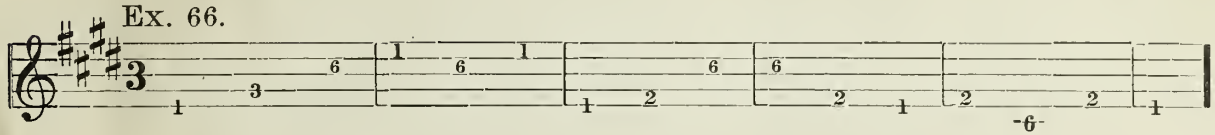

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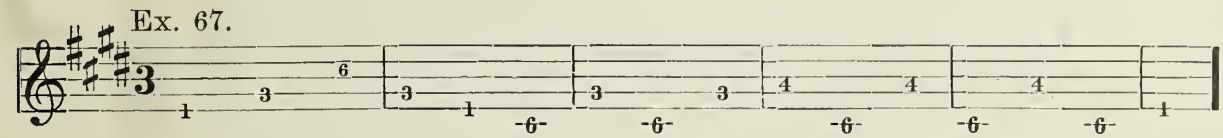

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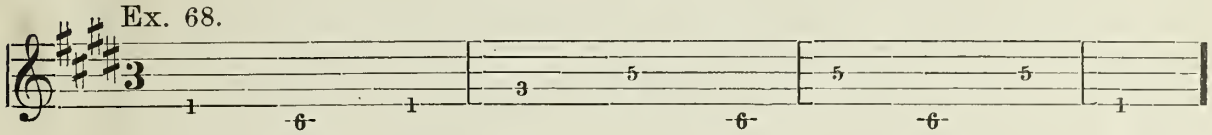

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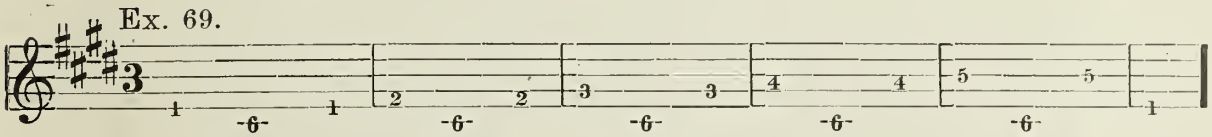

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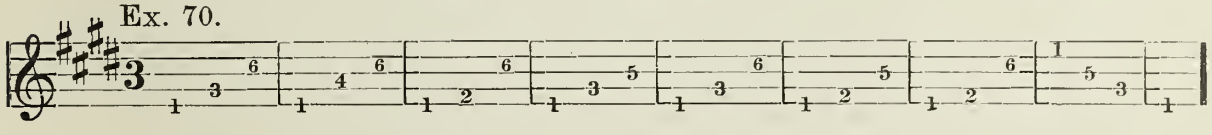

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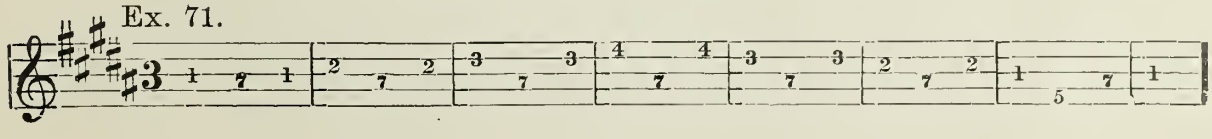
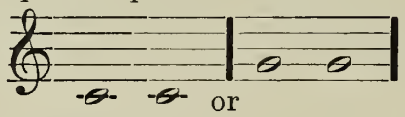


LESSON VIII.

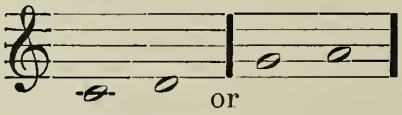
Intervals. Primes.

The lines and spaces on the staff, are called degrees. The association of any *two* tones is called an interval. Intervals receive their general names from the number of degrees which they occupy on the staff. Thus: Two tones on the same degree form the interval called a perfect prime. Thus

Fig. 15. 

Seconds.

Two tones on two contiguous degrees form the interval of a second. Thus:

Fig. 16. 

Two tones occupying three degrees (counting the intervening degree) form the interval called a third, as:

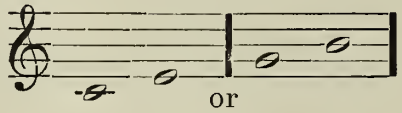
Fig. 17. 

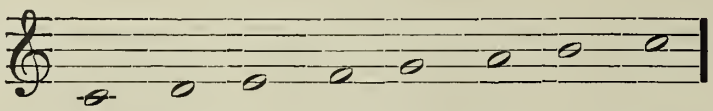
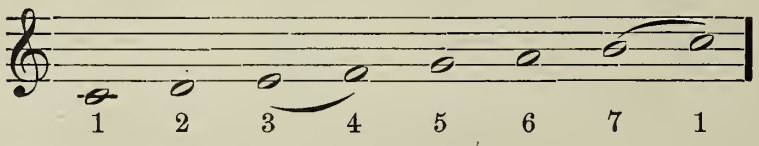
Fig. 18. 

Fig. 19. 

An examination of the series of tones found in Fig. 18 discloses the fact that the well known major scale is composed of seconds. A closer examination proves that these seconds are not all alike; that the seconds formed by the 3rd. and 4th. and 7th. and 1st. tones are only half as large as the other seconds in the scale, Fig. 19. The difference in the seconds produces a corresponding difference in all the other intervals; this fact will become more evident as each variety of interval comes up for study. The smaller seconds, those between 3 — 4 and 7 — 1, are called minor seconds; the larger seconds, those between 1 — 2, 2 — 3, 4 — 5, 5 — 6, 6 — 7 are called major seconds.

Write out a major scale from c, g, d, a, e, b, f♯ and arrange the minor seconds in each scale between 3 — 4, 7 — 1 by the use of sharps placed before each tone which must be raised. Write out a major scale form f, b♭, e♭, a♭, d♭, g♭, and arrange the minor seconds between 3 — 4, 7 — 1 by the use of flats placed before each tone which must be lowered.

LESSON IX.

Write Ex. 7 of Solfeggio Book No. 1 in each of the above mentioned keys, in both the G and F clefs, and from the same starting point, (tonic). Care should be taken to preserve the same form of time and the sharps or flats should now be placed in the signature.

Recite these exercises by number in monotone, in time with the metronome at ♩= 72 and play them with both hands while thus reciting. Sing also as many as come within the compass of the voice using the syllable Loo or La. When singing take the pitch of one from the instrument and compel the ear to judge of the tunefulness of each interval as it is sung. The instrument may be heard again at the octave and at the return to one in order to prove the work.

LESSON X.

Study Ex. 8 in the Solfeggio Book No. 1 as follows: Recite the numbers in monotone several times with the metronome; (♩= 72), then play it with two hands while reciting; then sing it according to previous directions; then spell the exercise as it would be played in the key of C-major in time with the metronome; then play it in that key with two hands and, at the same time, recite the numbers; the same exercise should also be spelled and played in several other major keys.

Study Ex's. 9 to 17 of the Solfeggio Book No. 1 in like manner until these exercises can be played as readily in one major key as in another.

LESSON XI.

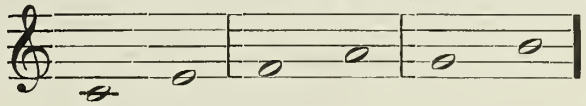
Thirds.

An interval which occupys three degrees of the staff is called a third. In Fig. 20 the scale of C-major is divided into thirds by means of the slurs above the notes; the smaller slurs under the notes mark the two minor seconds between 3 — 4. and 7 — 1.

Fig. 20.

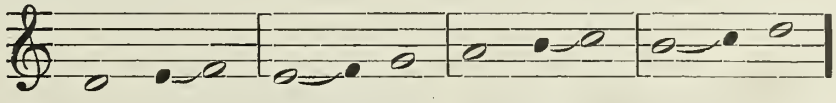
A careful inspection will show that some of the thirds include one of these minor seconds and others do not; it is evident from this fact that the thirds which do not include one of the minor seconds are larger than the others: the larger thirds are formed by the tones 1 – 3, 4 – 6, 5 – 7, (See Fig. 21) and are called major thirds.

Fig. 21.



The smaller thirds are formed by the tones 2 – 4, 3 – 5, 6 – 1, 7 – 2, (See Fig. 22) and are called minor thirds.

Fig. 22.

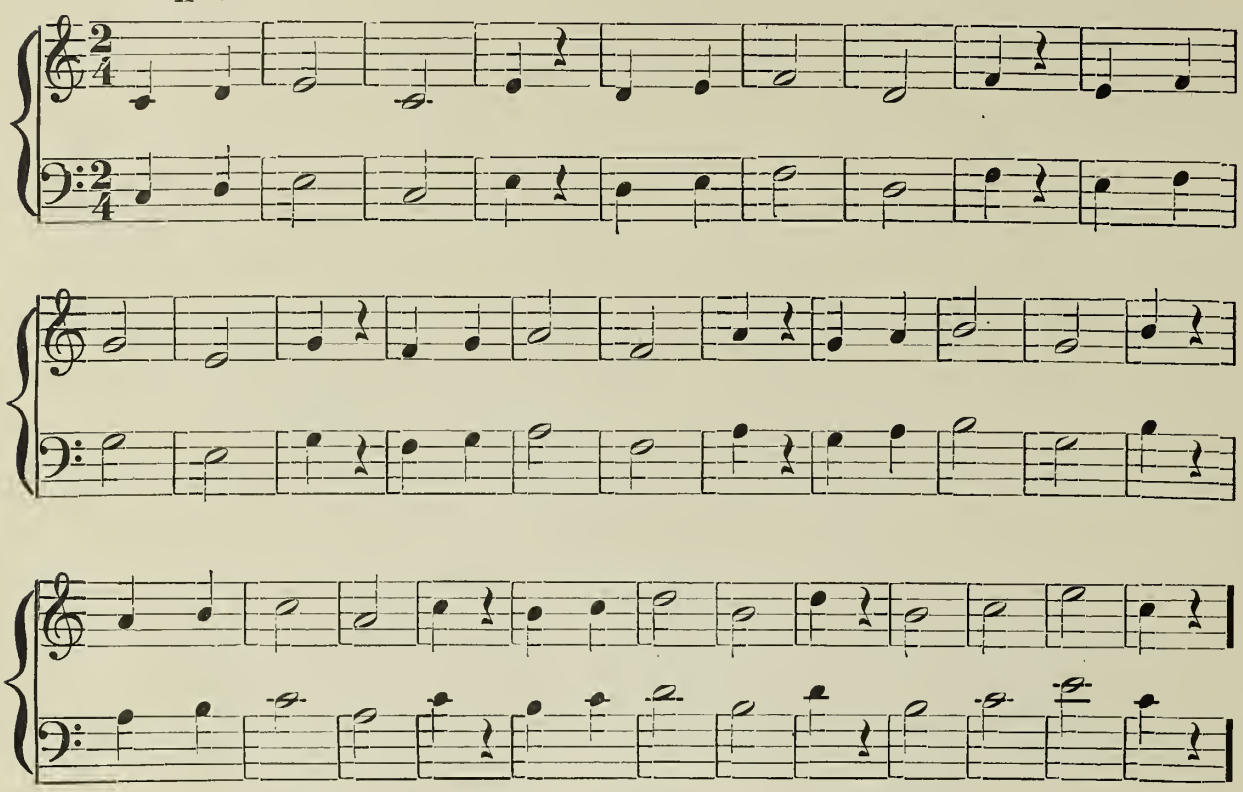


Memorize these in both the ascending and descending order and note the fact that it is the presence or absence of the minor seconds, 3 – 4 & 7 – 1, which makes the difference in the thirds, (See Fig's. 21 & 22).

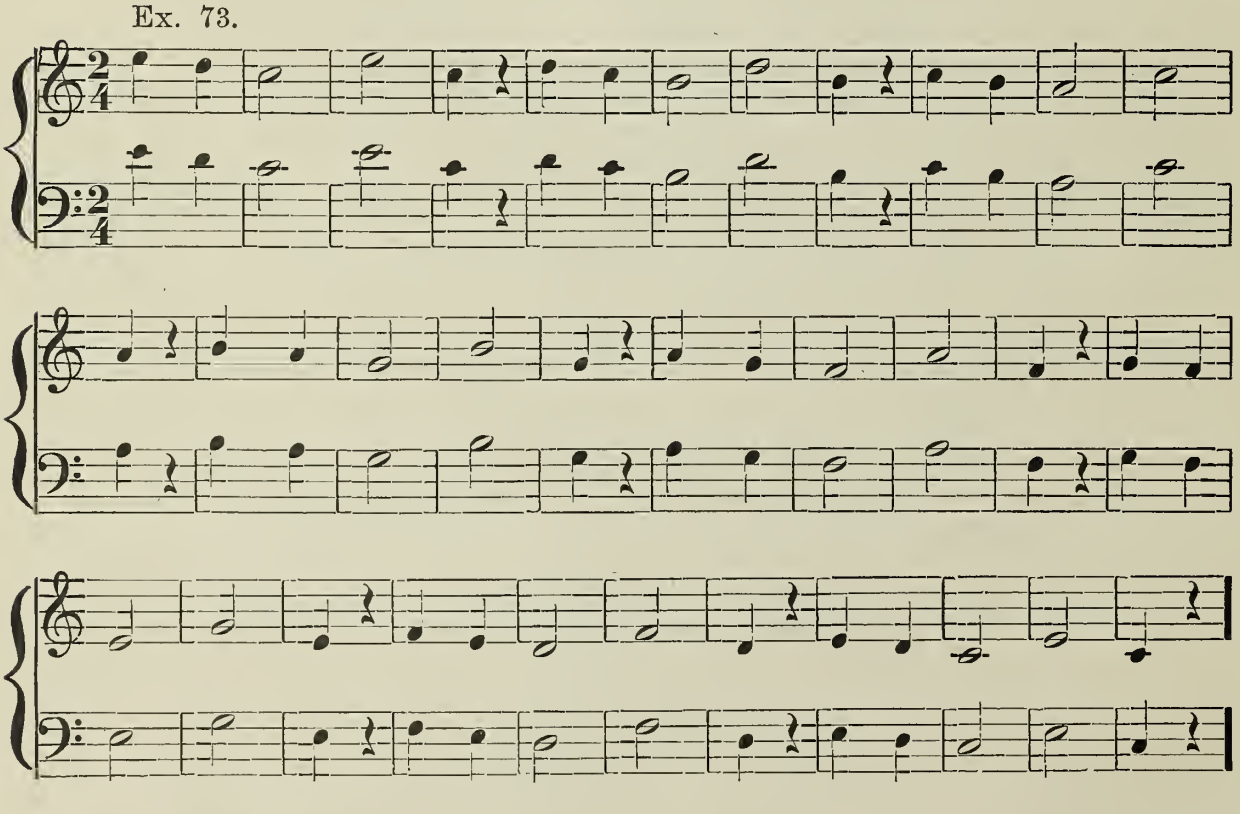
Analyze Ex's. 72 & 73 until each number and interval is recognized at a glance; sing them until intonation and rhythm are correct; spell them in the key of G-major; play them in this key with two hands and recite the numbers while so doing. Spell and play them in all other major tonalities which have their tonics on the white keys; write them out in all major tonalities which have their tonics on the black keys; write the proper fingering and play them in each of these keys.

Thirds and Seconds.

Ex. 72.



Ex. 73.

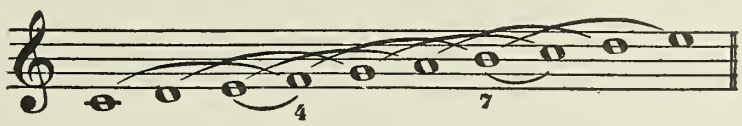


LESSON XII.

Fourths.

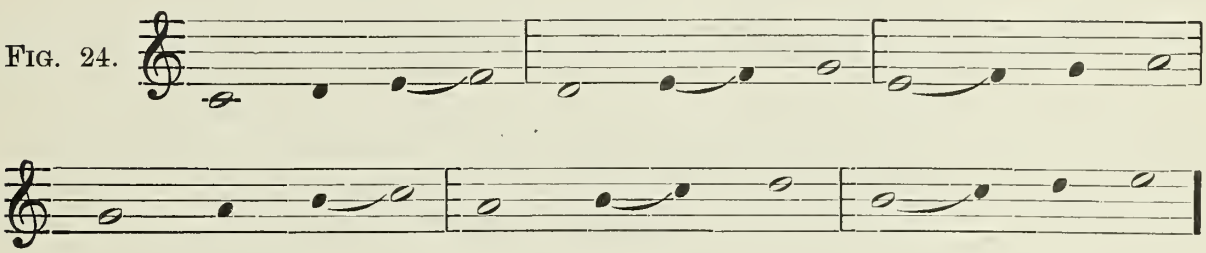
An interval which occupys four degrees of the staff is called a fourth. In Fig. 23 the scale of C-major is divided into fourths by means of slurs above the notes, the minor seconds of the scale are marked by the slurs beneath the notes.

Fig. 23.



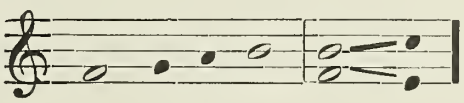
It will be seen that all the fourths, except that formed by the tones 4 and 7, contain one of the minor seconds; these are called perfect fourths; the fourth from 4 to 7 contains neither of the minor seconds, it is therefore, larger than the perfect fourths and is called an augmented fourth. When reduced to seconds the perfect fourths will be found to contain two major seconds and one minor second; the augmented fourth contains three major seconds. The perfect fourths are formed by the tones 1 – 4, 2 – 5, 3 – 6, 5 – 1, 6 – 2, 7 – 3.

Fig. 24.



The augmented fourth is formed by the tones 4 – 7, the two most active tones of the scale, the 4 having a strong tendency to move to 3 and the 7 to 1.

Fig. 25.



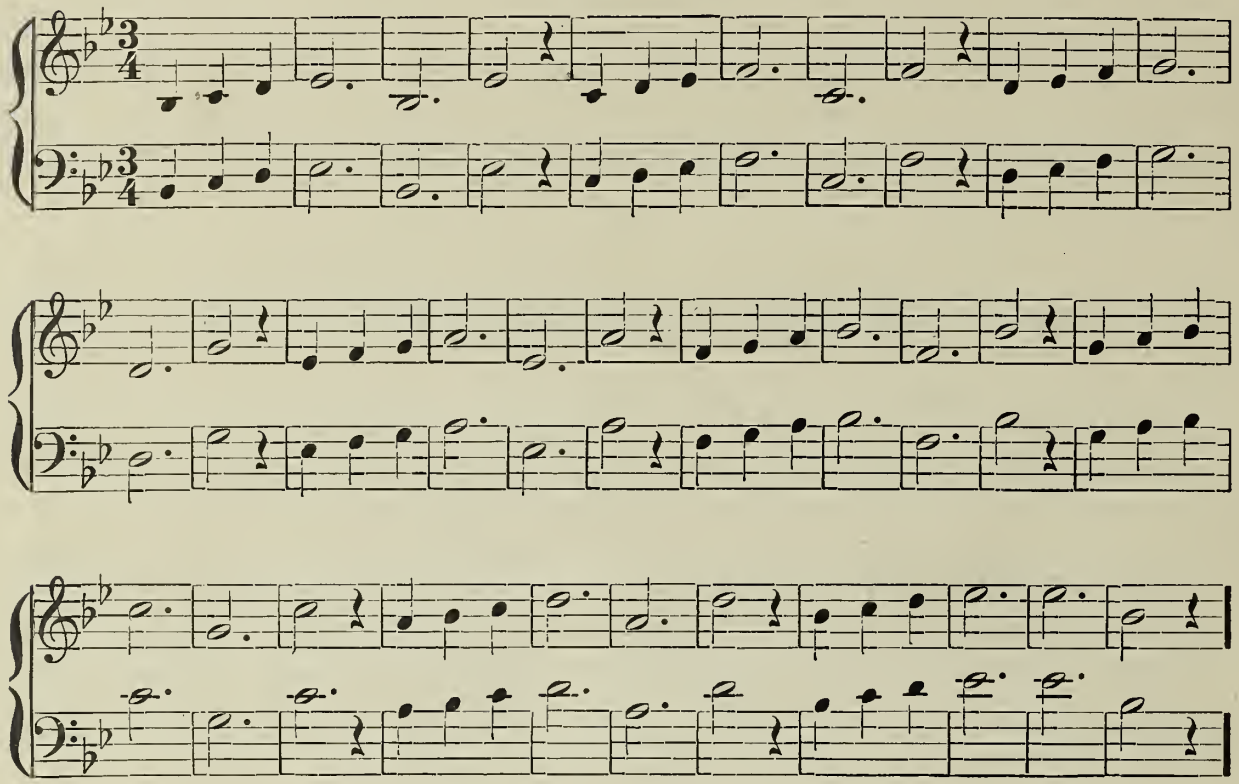
(See also Lesson II.)

Memorize these fourths in both the ascending and descending order and again note the fact that it is the presence or absence of the minor seconds 3– 4 & 7 – 1 which makes them differ.

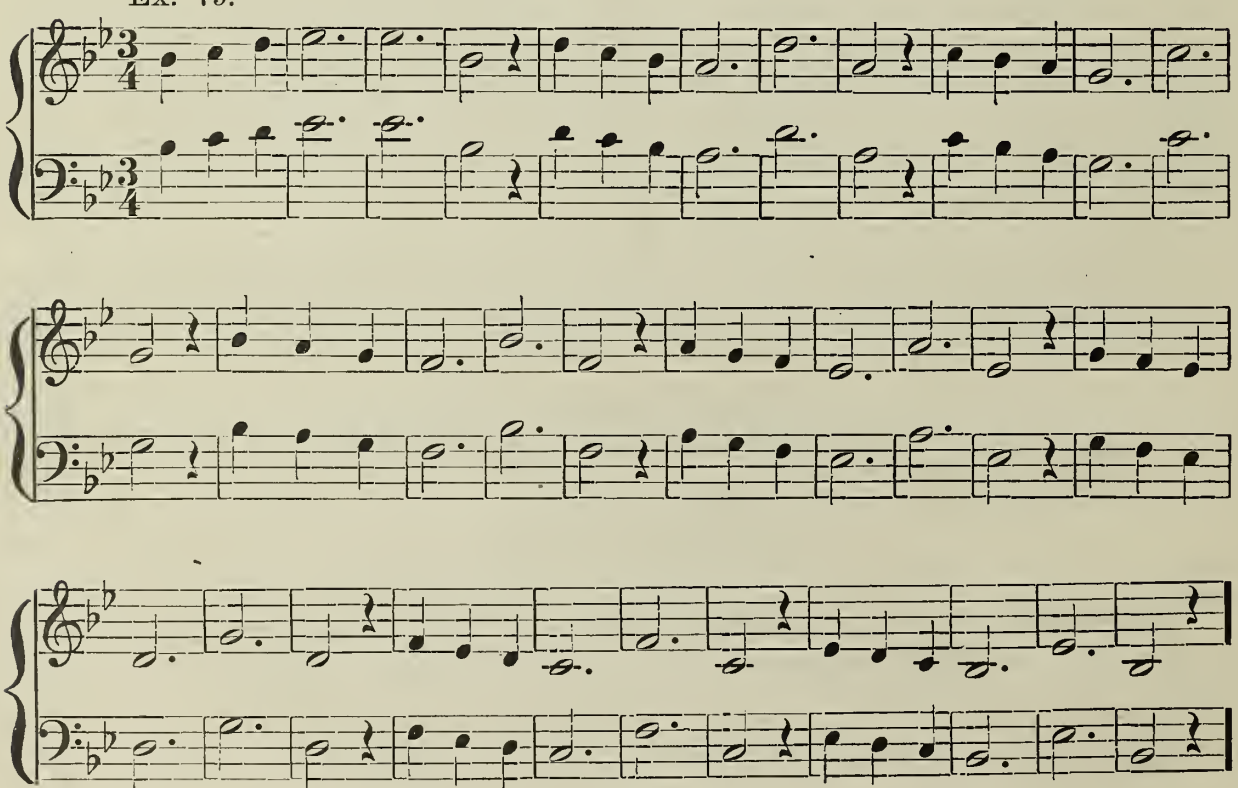
Study Ex's. 74 & 75 exactly according to the directions for Ex's. 72 & 73.

Fourths, Thirds, Seconds.

Ex. 74.



Ex. 75.

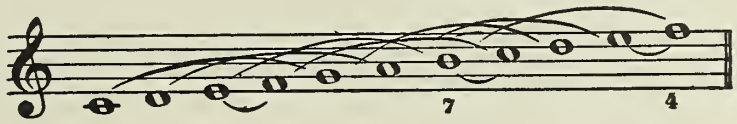


LESSON XIII.

Fifths.

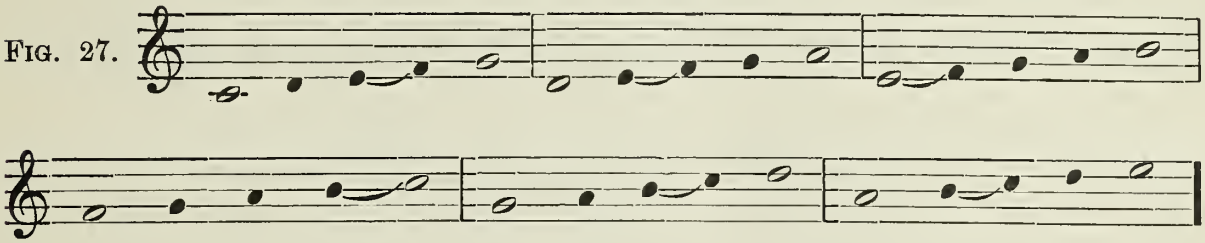
An interval which occupys five degrees on the staff is called a fifth. In Fig. 26 the scale of C-major is divided into fifths and the minor seconds of the scale marked as before.

Fig. 26.



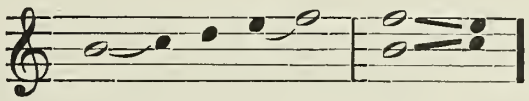
It is here seen that all the fifths, except that from 7 up to 4, contain three major seconds and one minor second; these are called perfect fifths. The fifth from 7 up to 4 contains two major and two minor seconds, therefore it is smaller than the perfect fifths and is called a diminished fifth. The perfect fifths are formed by the tones 1 – 5, 2 – 6, 3 – 7, 4 – 1, 5 – 2, 6 – 3.

Fig. 27.



The diminished fifth is formed by the tones 7 – 4, the two most active tones of the scale which exhibit a strong tendency to move to the state of rest found in 1 – 3. (See Fig. 28).

Fig. 28.



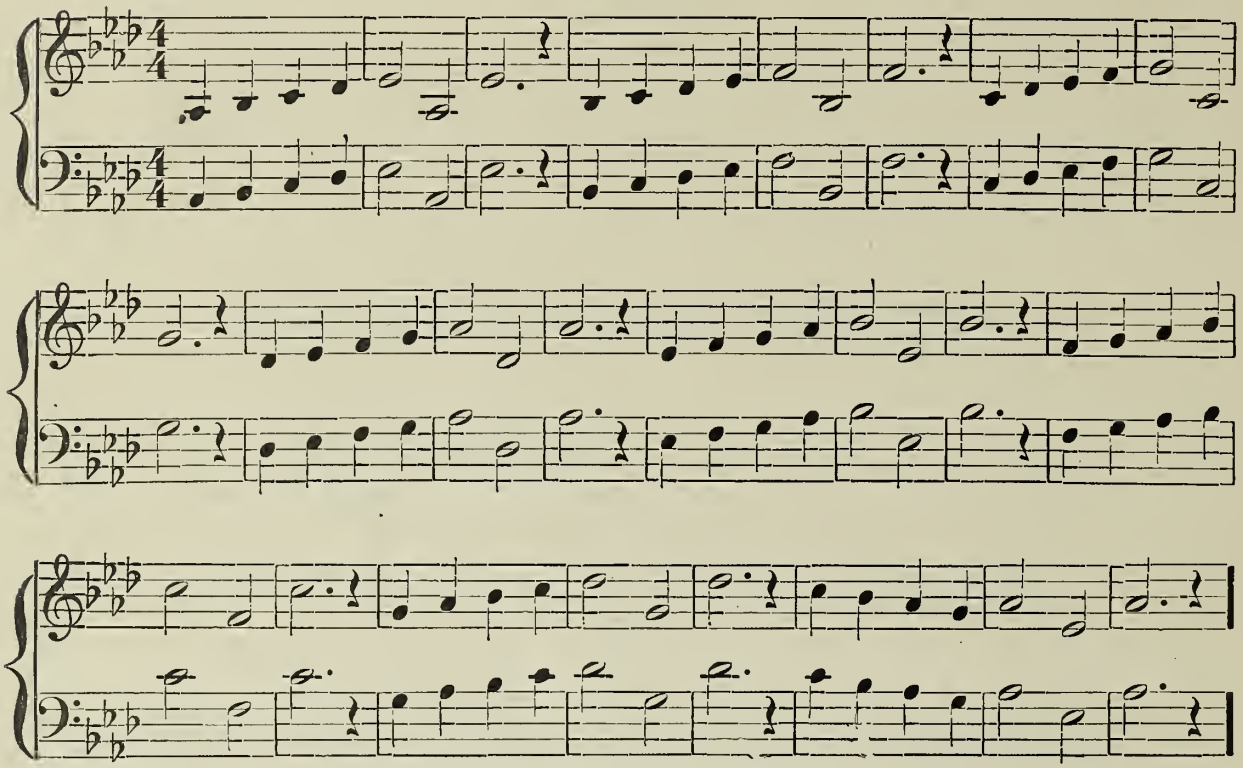
Memorize these fifths in both the ascending and descending order not neglecting to note that the difference in the size of the fifths is produced by the minor seconds 3 – 4, & 7 – 1.

Analyze, sing, spell, play, write and finger Ex's. 76 & 77 according to the directions for Ex's. 72 & 73.

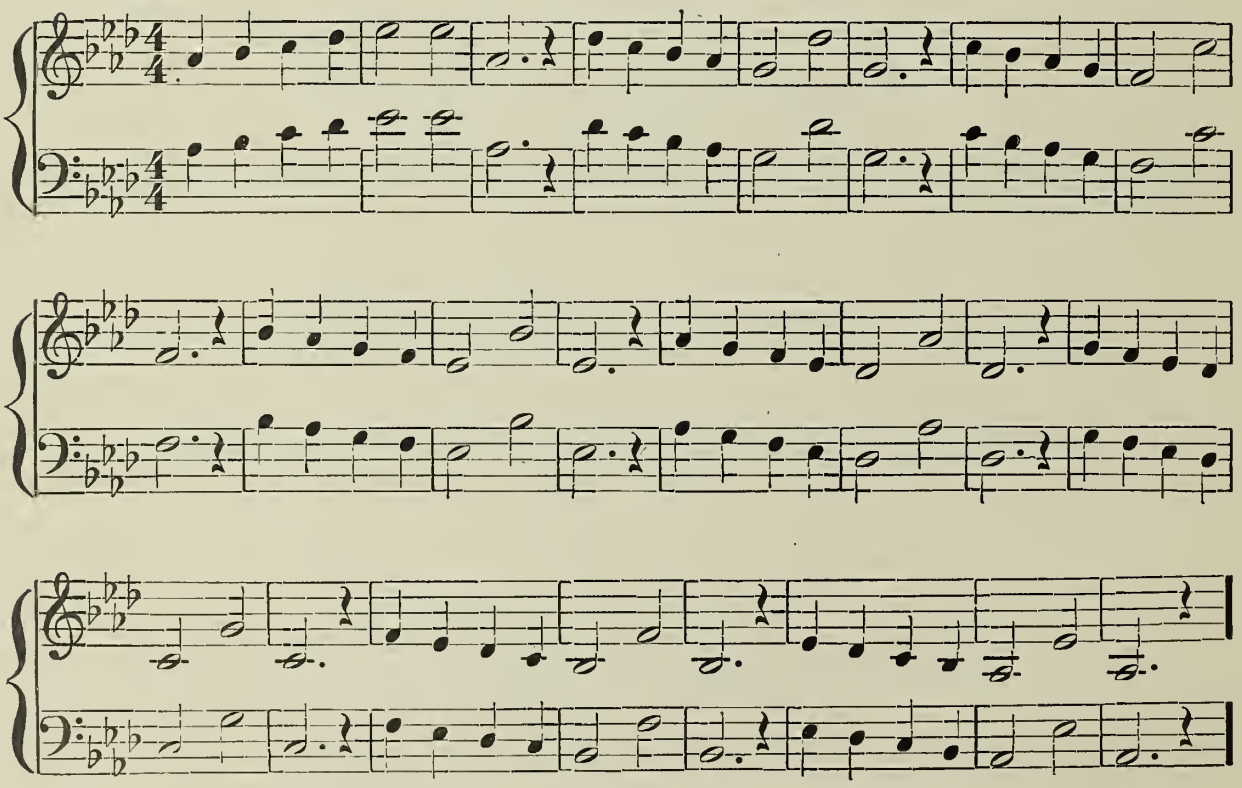
The most common form of compound measure is here introduced; viz. four-part measure compounded from two, two-part measures which are marked by an accent on the first beat called the primary accent and another, a trifle less marked, on the third beat, called the secondary accent.

Fifths, Fourths, Seconds.

Ex. 76.



Ex. 77.



LESSON XIV.

Sixths.

An interval which occupys six degrees on the staff is called a sixth. Sixths which contain but one of the two minor seconds found in the major scale are called major sixths. Fig. 31. Sixths which contain both are called minor sixths. Fig. 32.

Inversion of Intervals.

A comparison of Fig's. 25 & 28 discloses the fact that the augmented fourth and diminished fifth are composed of the same tones but in a varying order; 4 up to 7 forming the augmented fourth; 7 up to 4 forming the diminished fifth. This reveals the law that augmented intervals when inverted become diminished intervals and *vice versa*. A further comparison of Fig's. 25 & 28 shows that the two intervals come to a state of rest in the same tones but also in a varying order; the augmented fourth moves to 3 – 1 in the form of a sixth; the diminished fifth moves to 1 – 3 in the form of a third. Thus a major third when inverted becomes a minor sixth and a minor sixth when inverted becomes a major third; This also reveals the law that inversion makes major intervals minor and minor intervals major. The minor seconds 3 – 4 & 7 – 1 are again the cause of these differences in the size of the intervals. As shown in Fig. 29 the augmented fourth contains neither of these minor seconds while the diminished fifth contains both. So also the major third contains neither 3 – 4 or 7 – 1, while both of them are found in the minor sixth. Fig. 30.

Fig. 29.

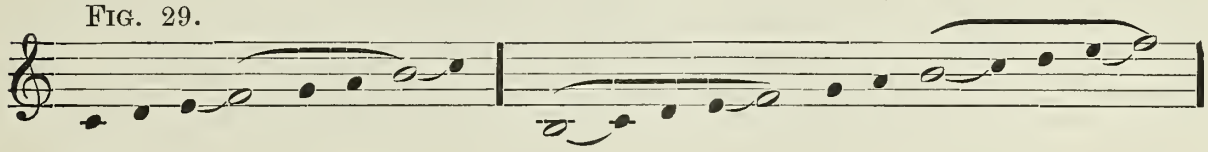
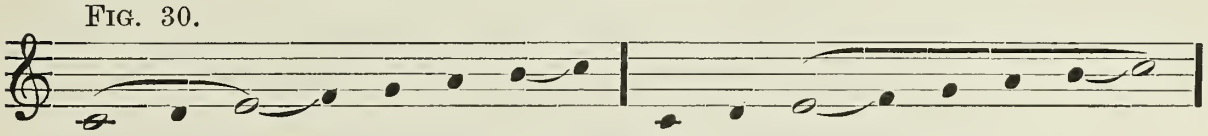
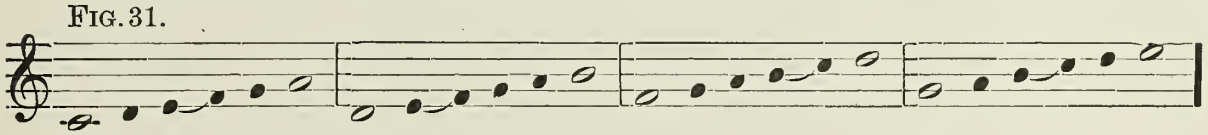


Fig. 30.



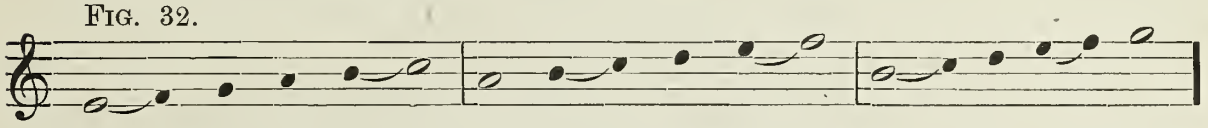
The major sixths are formed by the tones 1 – 6, 2 – 7, 4 – 2, 5 – 3.

Fig. 31.



The minor sixths are formed by the tones 3 – 1, 6 – 4, 7 – 5.

Fig. 32.

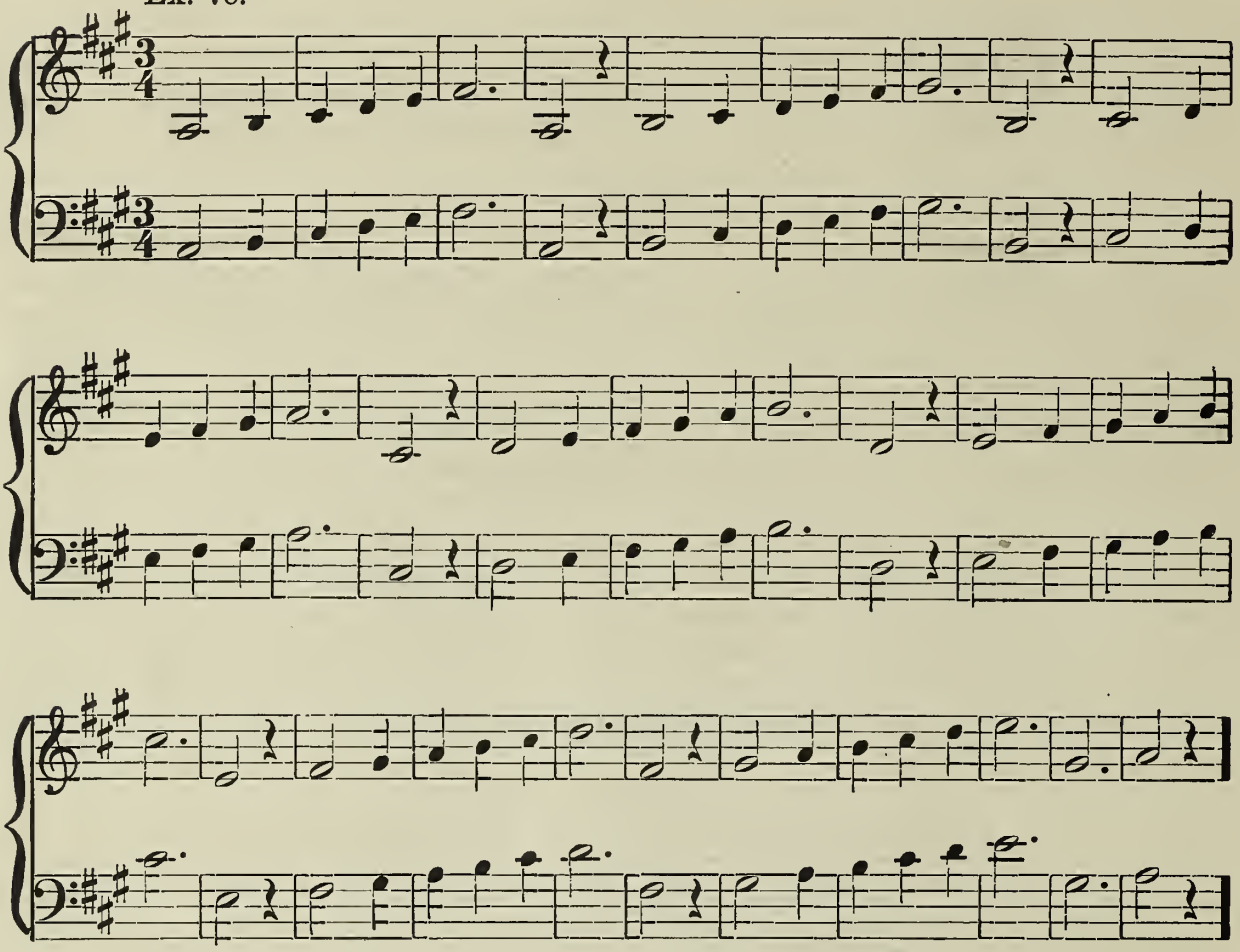


Memorize the sixths in both the ascending and descending order. A comparison of Fig's. 22 & 31, 21 & 32 will show that the same tones which form the thirds are used to form the sixths, but in inverse order. If the thirds have been well committed to memory the sixths will be quickly learned.

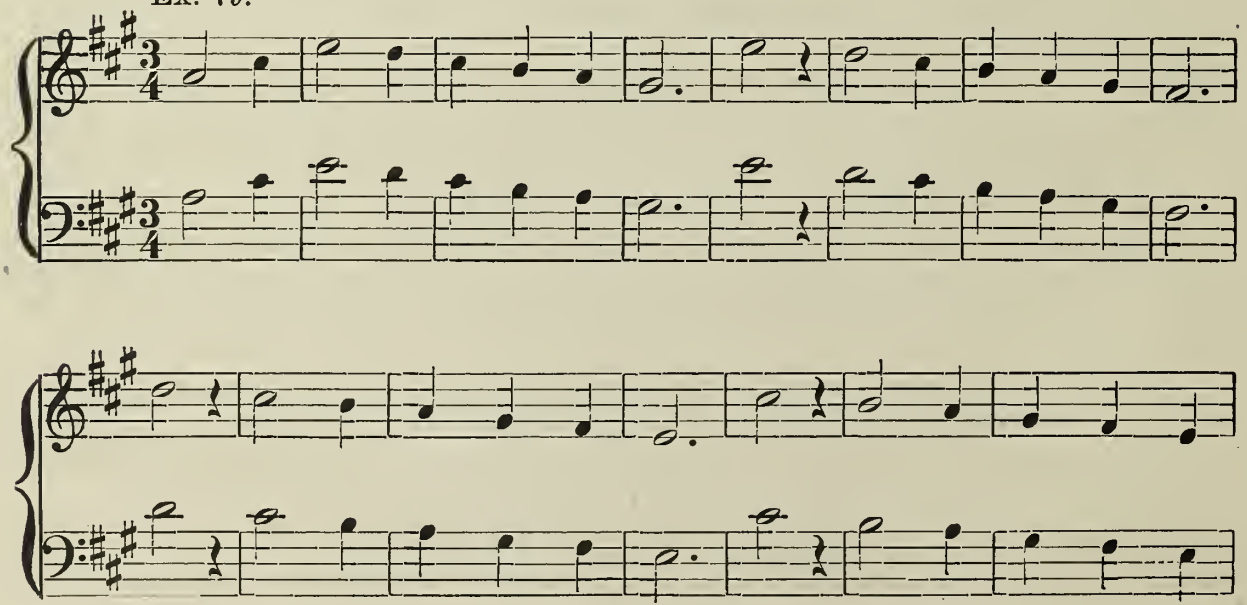
Study Ex's. 78 & 79 in the same manner and in all the varied forms (Analysis, singing, spelling, writing, etc.) mentioned in the directions for the fore-going Ex's. in intervals.

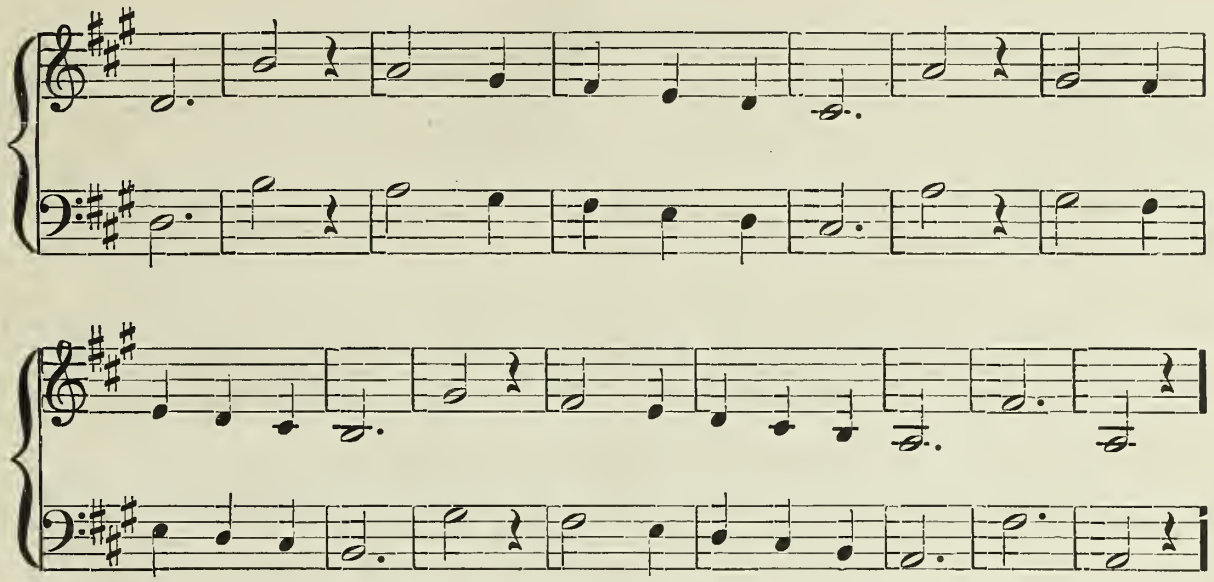
Sixths and Seconds.

Ex. 78.



Ex. 79.



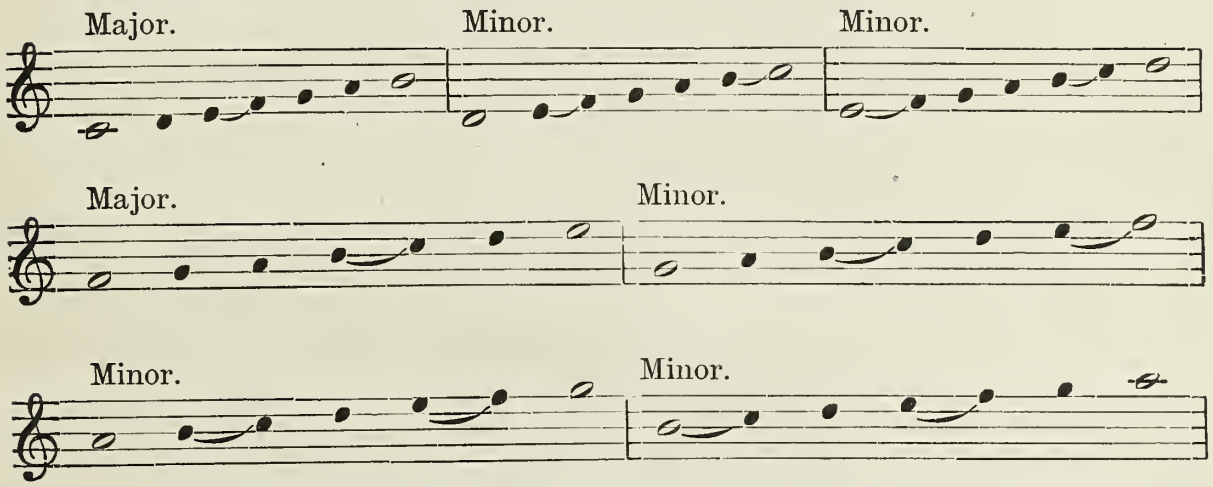


LESSON XV.

Sevenths.

An interval which occupys seven degrees on the staff is called a seventh. Sevenths which contain but one of the two minor seconds of the major scale are called major sevenths. Sevenths which contain both are called minor sevenths. The major sevenths are formed by the tones 1 – 7, 4 – 3; the minor sevenths are formed by the tones 2 – 1, 3 – 2, 5 – 4, 6 – 5, 7 – 6.

Fig. 33.

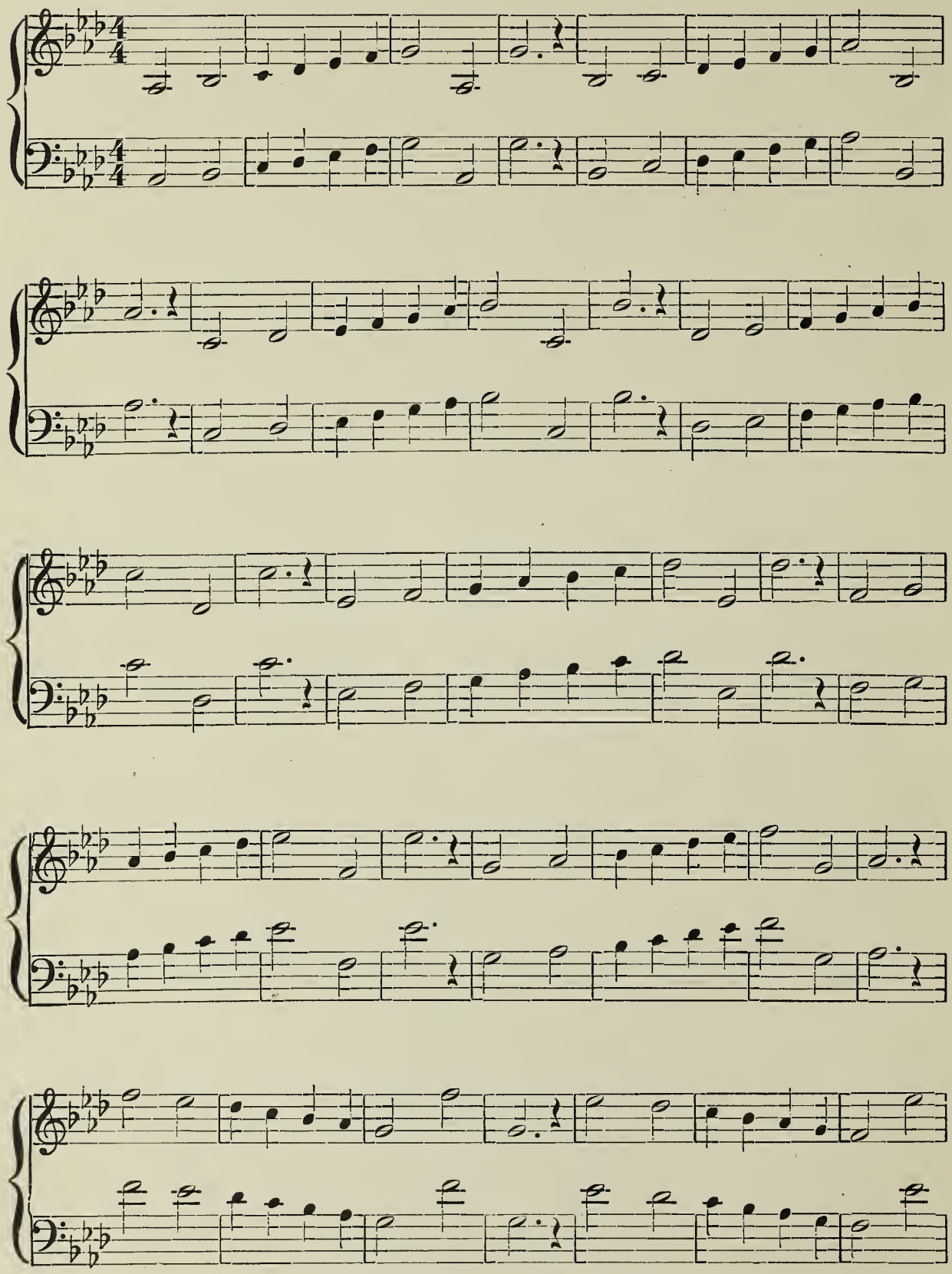


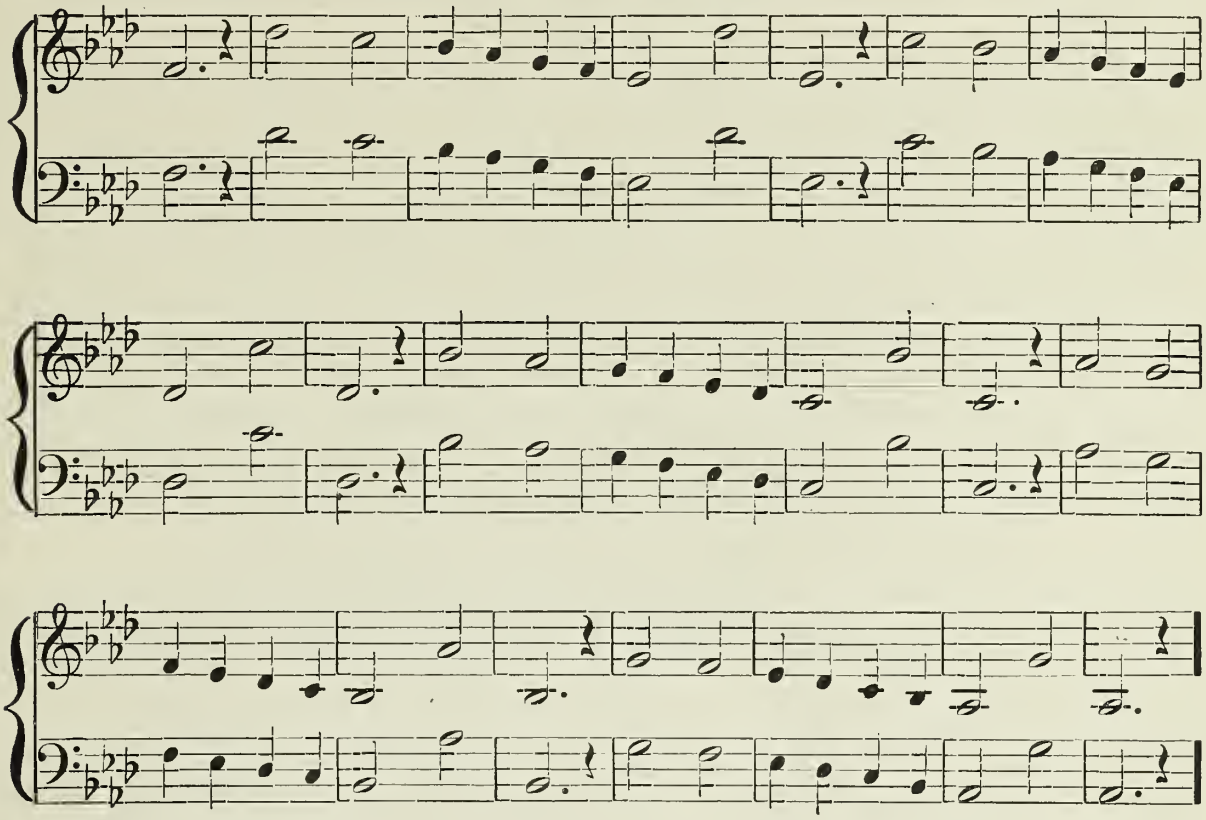
A comparison of Fig's. 19 & 33 will show that sevenths are the inversion of seconds; keep this fact in mind, while memorizing the sevenths, as an assistance to the memory.

Study Ex. 80 according to the previous directions.

Sevenths, Sixths, Seconds.

Ex. 80.



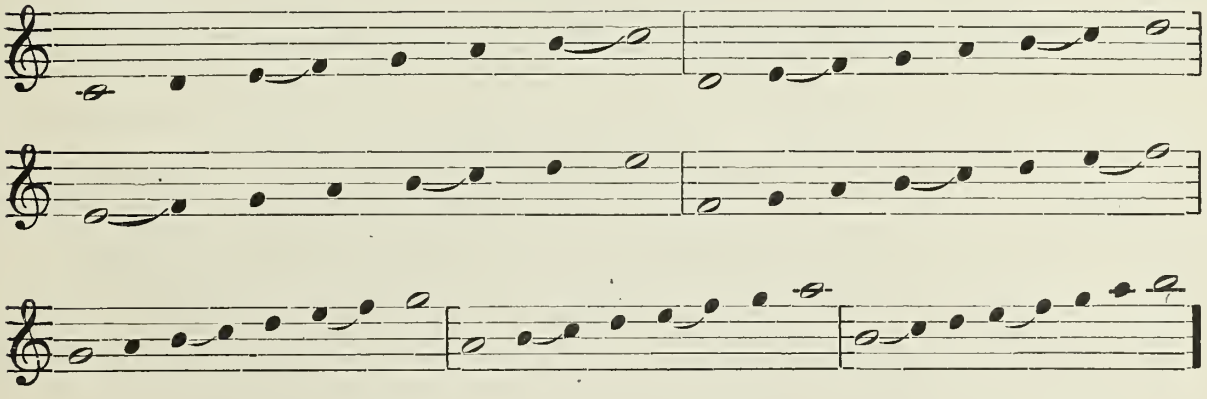


LESON XVI.

Octaves, Ninths, Tenths.

An interval which occupys eight degrees on the staff is called an octave. All the octaves of the major scale are of the same kind, (because each one contains the two minor seconds), and are called perfect octaves. A comparison of Fig's. 15 & 34 will show that octaves are the inversion of primes.

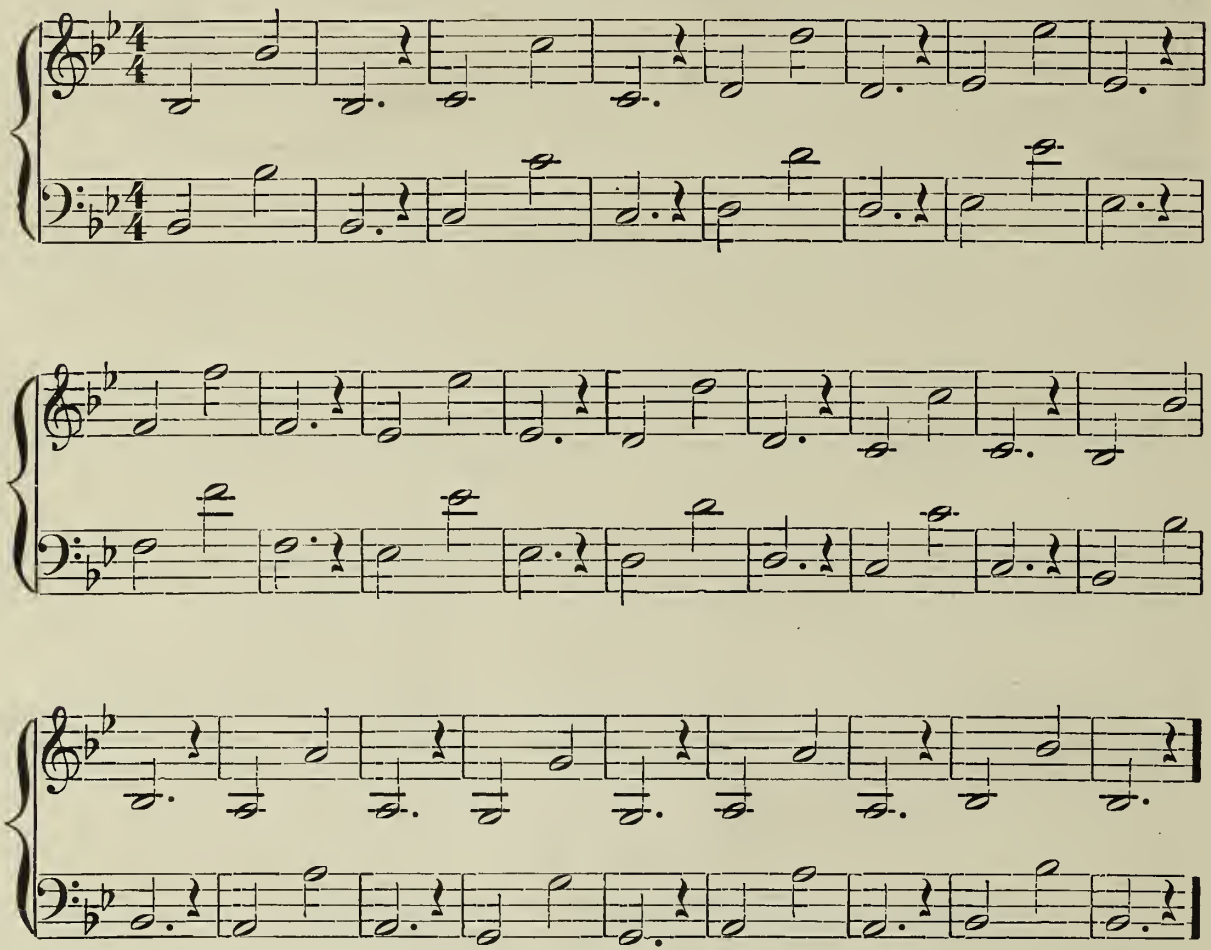
FIG. 34.



Sing Ex. 81 with careful attention to both intonation and rhythm. Play it in all major keys.

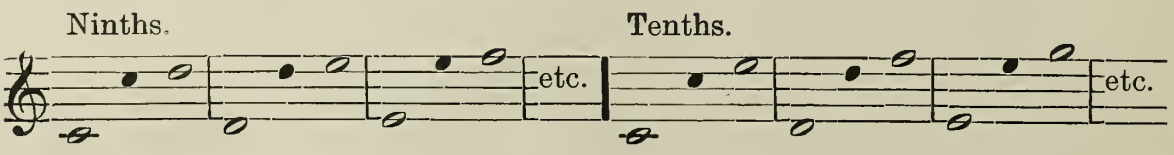
Octaves, Seconds.

Ex. 81.



Intervals larger than an octave are also named from the number of degrees they occupy on the staff. An interval occupying nine degrees is called a ninth; one occupying ten degrees, a tenth and so on.

Fig. 35.



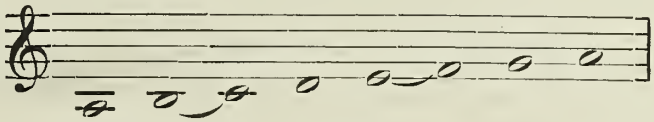
It will be seen from Fig. 35 that these intervals are formed by the addition of a second or a third etc. to an octave. Write out all the ninths and tenths in all major keys after the model given in Fig. 35.

LESSON XVII.

The Minor Mode.

Only the major mode and its intervals have been hitherto considered; in so doing the important functions of the two minor seconds of the scale have been fully demonstrated. Not only are they necessary to the major scale but they must occur at 3 – 4 & 7 – 1 or the scale looses its major character. When they are found at any other point, the scale becomes so changed in its effect as to necessitate a new name. A scale played on the white keys of the piano-forte from a to a^1 will place the minor seconds between 2 & 3, 5 & 6 and will illustrate the effect produced by the changed position of minor seconds; it will also furnish a basis for the study of the minor mode.

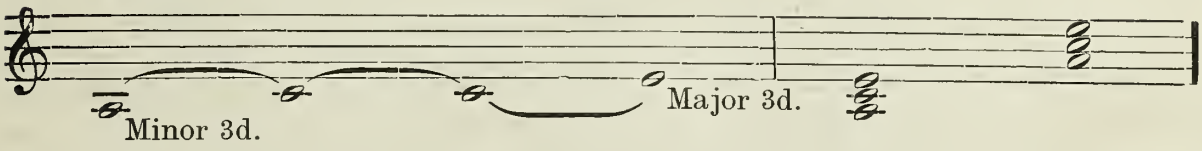
Fig. 36.



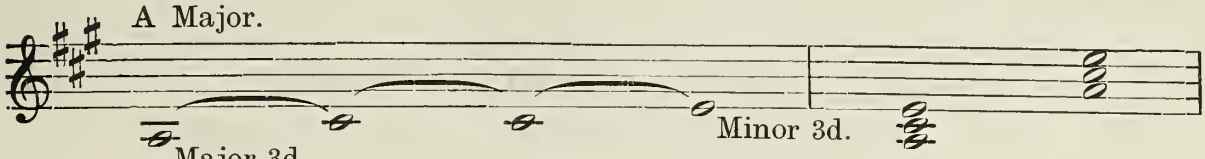
This scale is called minor because its inactive tones, 1 – 3 – 5, which establish the key, form a minor chord in distinction from the major chord formed by the tones 1 – 3 – 5 of the major scale.

Fig. 37.

A Minor.



A Major.



It is called the pure minor in distinction from other forms of the minor scale which are derived from it.*

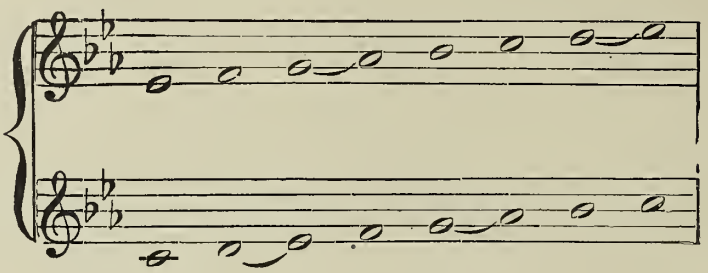
Write a scale from a, e, b, f♯, c♯, g♯, d♯, e♭, b♭, f c, g, d.

Use no signature and make the minor seconds come between 2 – 3 and 5 – 6, by the use of the proper sharps, or flats.

This having been done with care, count the number of *different* sharps or flats in each scale and place them in their proper position for a signature; This will disclose the fact that certain major and minor scales have the same signature. Write a minor scale from each of the above mentioned tones; Write the major scale, having the same signature, immediately under it, (after the model in Fig. 38). and mark, with a slur, the minor seconds in each scale.

Note:—* (The terms major and minor have come to indicate the difference in the consonant effects produced by the two chords as well as the difference in the size of the intervals of which the chords are composed. See Fig. 37).

FIG. 38.



Major and minor scales having the same signature are said to be relative: viz C-minor is the relative minor of E♭ major etc. Note that each minor scale has its tonic a minor third below the tonic of its relative major. Memorize these keys so that if one be mentioned the relative, with its signature, can be immediately given. Play all the minor scales and sing those which come within the compass of the voice until the intonation is as correct and the succession of the tones as easily produced as the major scale.

LESSON XVIII.

Accidentals, Chromatic Intervals, Chromatic Scale.

Only those intervals have been hitherto introduced which are normal to the major scale. It is evident that any interval may be made larger or smaller by the use of the well known accidentals, sharp ♯, double-sharp 𝄪, flat ♭, double-flat ♭♭, and cancel ♮ (natural). The cancel, (so named because it cancels the effect of some previous sign), either raises or lowers a note and should, therefore, be spoken of as a sharp or flat, whenever it is necessary to mention it at all. (See Fig. 39).

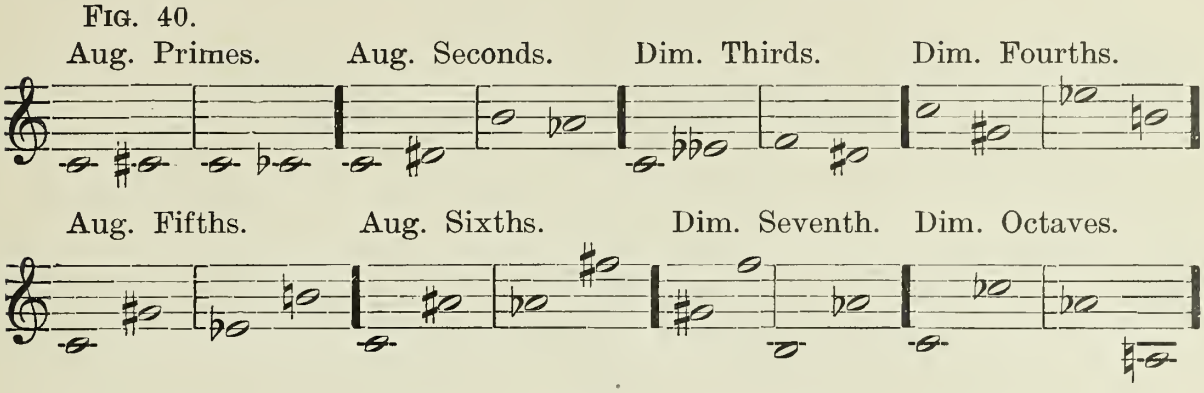
FIG. 39.

One, sharp-one. Three, flat-three.

The following is a list of the chromatic intervals which are in common use.

Augmented Primes.
Augmented Seconds.
Diminished Thirds.
Diminished Fourths.
Augmented Fifths.
Augmented Sixths.
Diminished Sevenths.
Diminished Octaves.

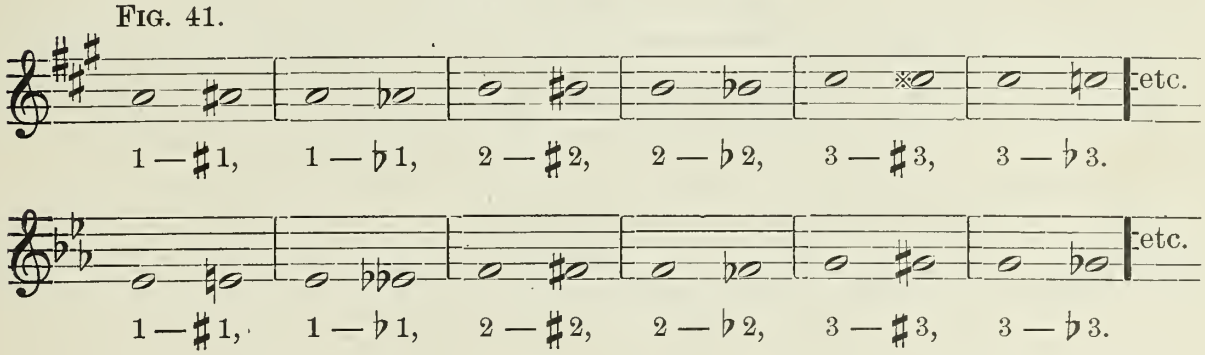
FIG. 40.



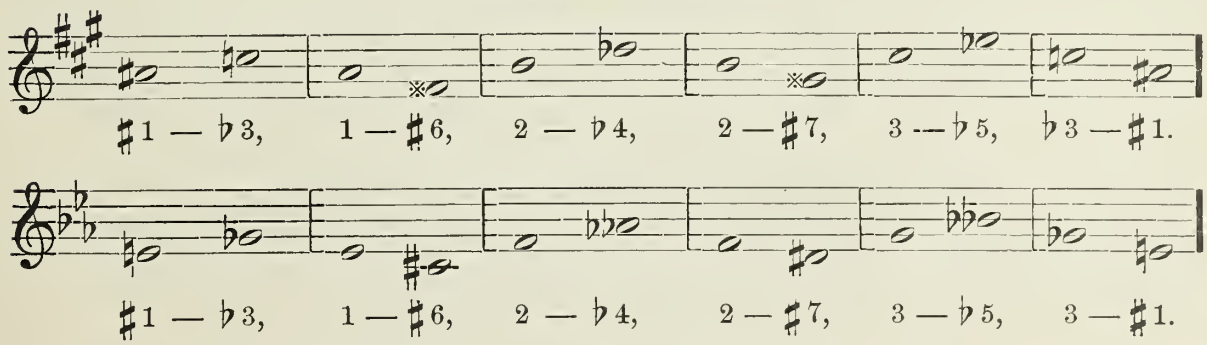
The Aug. second, dim. fourth, aug. fifth and dim. seventh are found in the different forms of the minor scale and will come up for study in their proper order. The augmented prime, diminished third, augmented sixth and diminished octave may be familiarized thus: Write augmented primes, both ascending and descending on each degree of the C, E, & A ♭ major scales using correctly the accidentals signs; begin each scale in the one-line group. Write a diminished third, an augmented sixth or a diminished octave, both ascending and descending, from each degree of the same scales. In order to construct a diminished third, an augmented sixth or a diminished octave it must be borne in mind that a major third must be reduced a whole step, a minor third a half step; a major sixth must be enlarged a half step, a minor sixth a whole step and a perfect octave must be reduced a half step. (See Fig. 41 for a model).

Augmented Primes.

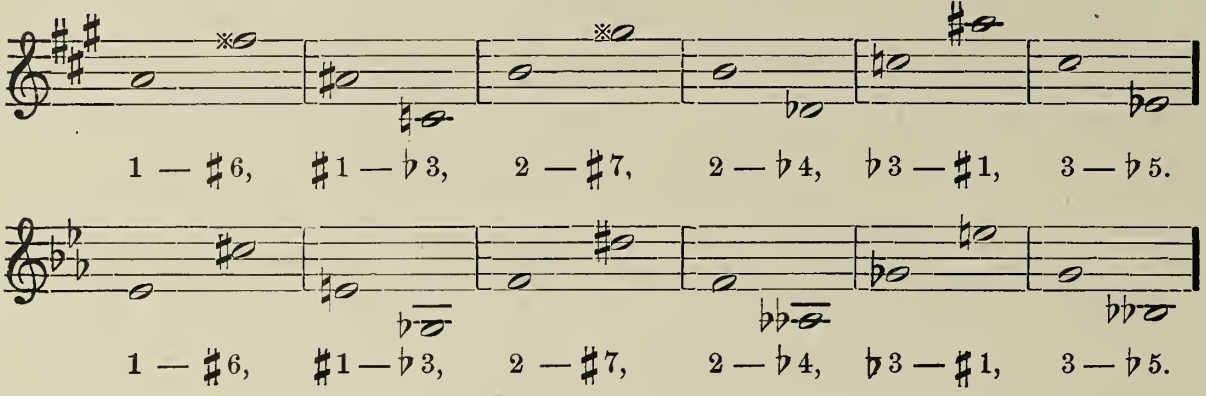
FIG. 41.



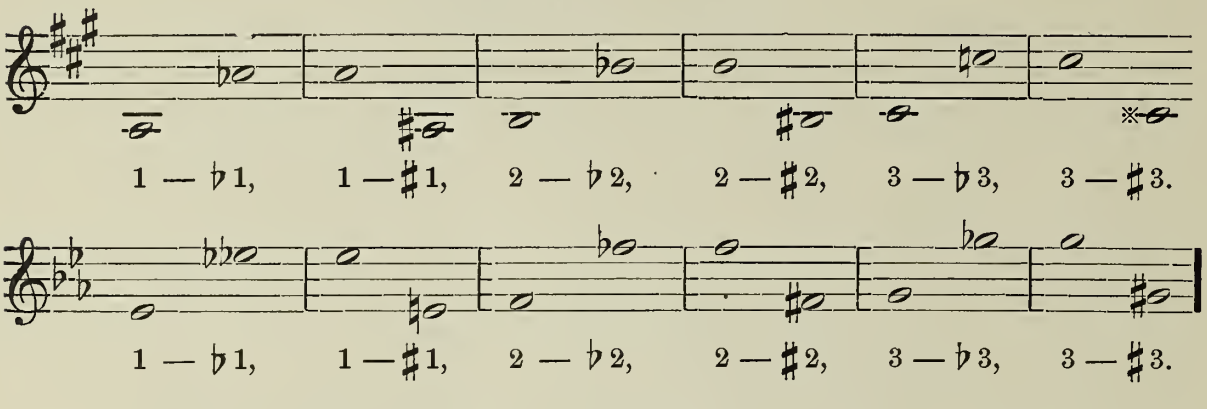
Diminished Thirds.



Augmented Sixths.



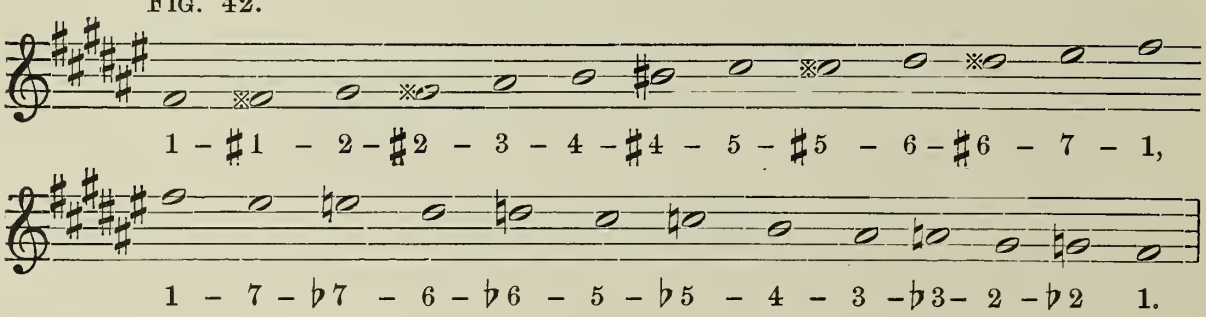
Diminished Octaves.



The foregoing process will serve to familiarize the notation, only, of these intervals: their sounds and how to learn them will be explained farther on.

Write a chromatic scale, both ascending and descending, from each major scale tonic, with the correct signature and proper accidentals using the following formula: 1, – sharp 1, – 2, – sharp, 2, 3, 4, sharp 4, 5, sharp 5, 6, sharp 6, 7, 1, 1, 7, flat 7, 6, flat 6, 5, flat 5, 4, 3, flat 3, 2, flat 2, 1. (See Fig. 42 for a model).

FIG. 42.

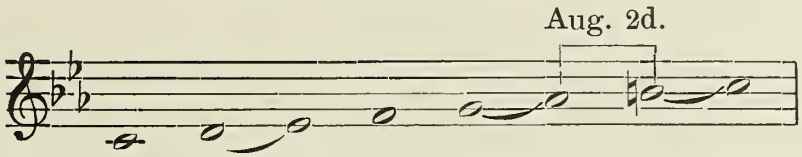


LESSON XIX.

The Melodic and Harmonic Minor Sales.

In the pure minor scale (Lesson XVII Fig's. 36 & 38) there is no leading-tone, as the minor seconds occur at 2 – 3 and 5 – 6; in the harmonic scale a leading-tone is formed by the introduction of a third minor second at 7 – 1.

Fig. 43.



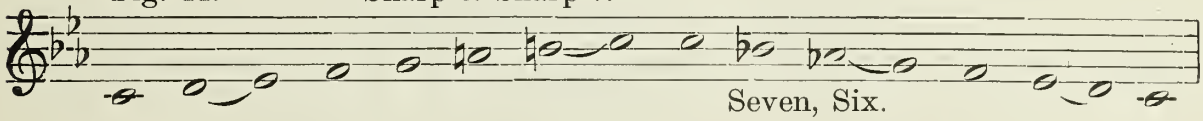
This additional minor second produces an augmented second, (a half step larger than a major second), at 6 – 7. Change the pure minor scales, already written, to the harmonic form and mark the augmented second with a bracket as in Fig. 43.

Study Ex. 176 in Solfeggio Book No. 2 as follows: It is divided into nine sections by the double bars; say the numbers to the first section in strict time; (metronome ♩= 72), analyze it until each interval can be instantly named; sing it until the intonation and rhythm are correct; Study each section in this manner and then attempt to sing the entire exercise. The diminished fourths, in the third and fourth measures of each section, will present little difficulty owing to the strong attraction of the leading-tone.

The Melodic Minor Scale.

Because of the supposed awkwardness of the augmented second as a melodic progression composers have avoided it by raising the sixth and seventh degrees a half step in the ascending scales and restoring the scale to its pure form in descending.

Fig. 44. Sharp 6. Sharp 7.



As thus arranged the minor seconds occur at 2 3, 7 1, & 5 6. (See Fig. 44). These accidentals should be called sharp-six, sharp-seven and seven, six when restored.

Write all the melodic minor scales both ascending and descending; use the proper signature for each with the correct accidental signs for raising and restoring the sixth and seventh degrees. *

Write these scales with care and mark all the minor seconds with a slur. Study Ex. 187, Solfeggio Book No. 2, according to the explicit directions for Ex. 176 from the same book.

Key Signatures.

Each signature being the sign of both a major and a minor key it becomes necessary to look further in order to decide in which mode a composition is written. Exercises 176 & 187 may serve as a model to illustrate a rule which shall cover all cases. Each section contains all the characteristics of the minor mode, (viz. the proper chromatic sign for the raised sixth or seventh or both), and ends on the tonic of the minor. The following rule, therefore, will decide the question of key: If in the major it will end in the tonic chord; if in the minor it will also end in the tonic chord and will contain the raised seventh.

Note:—(In order to restore a note which has been altered by means of a double-sharp or double-flat it is necessary to use two signs; thus: ♮♯ or ♮♭).

LESSON XX.

Review and Examination.

LESSON XXI.

Major and Minor Mode, Transposition, Rhythm.

Analyze and sing Ex. 33, in Solfeggio Book No. 1, as it is written: Write it in F and G clefs in C-minor, melodic form with the proper signature and accidentals; (the second half being in the descending scale should be written in the pure form). Analyze and sing it in this form until the intonation and rhythm are perfect. Write out the same exercise in C-minor, harmonic form, mark the minor seconds with a slur, the augmented seconds with a bracket, analyze and sing it with great care. Pay special attention to the intonation of the leading tone in ascending and to the sub-mediant in descending; spell and play it in D-minor, harmonic form, in B-minor, melodic form, from the copies already made. Say the numbers to Ex. 188, Solfeggio book No. 2, in time: Begin with the metronome at ♩ = 80 and gradually increase the speed to ♩ = 108; Sing it at ♩ = 80 with careful attention to both rhythm and intonation.

LESSON XXII.

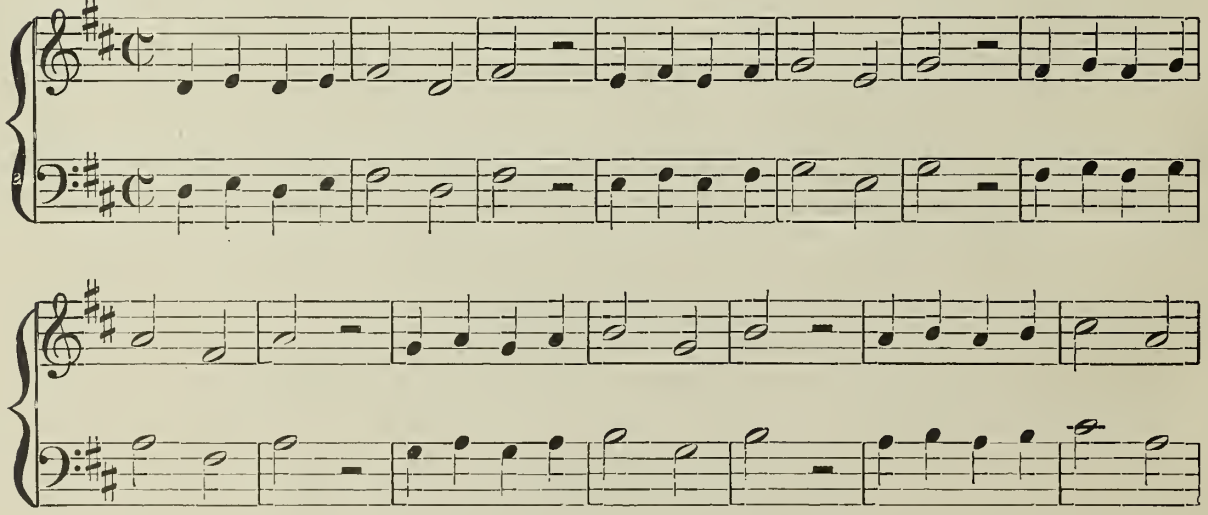
The same Subjects Continued.

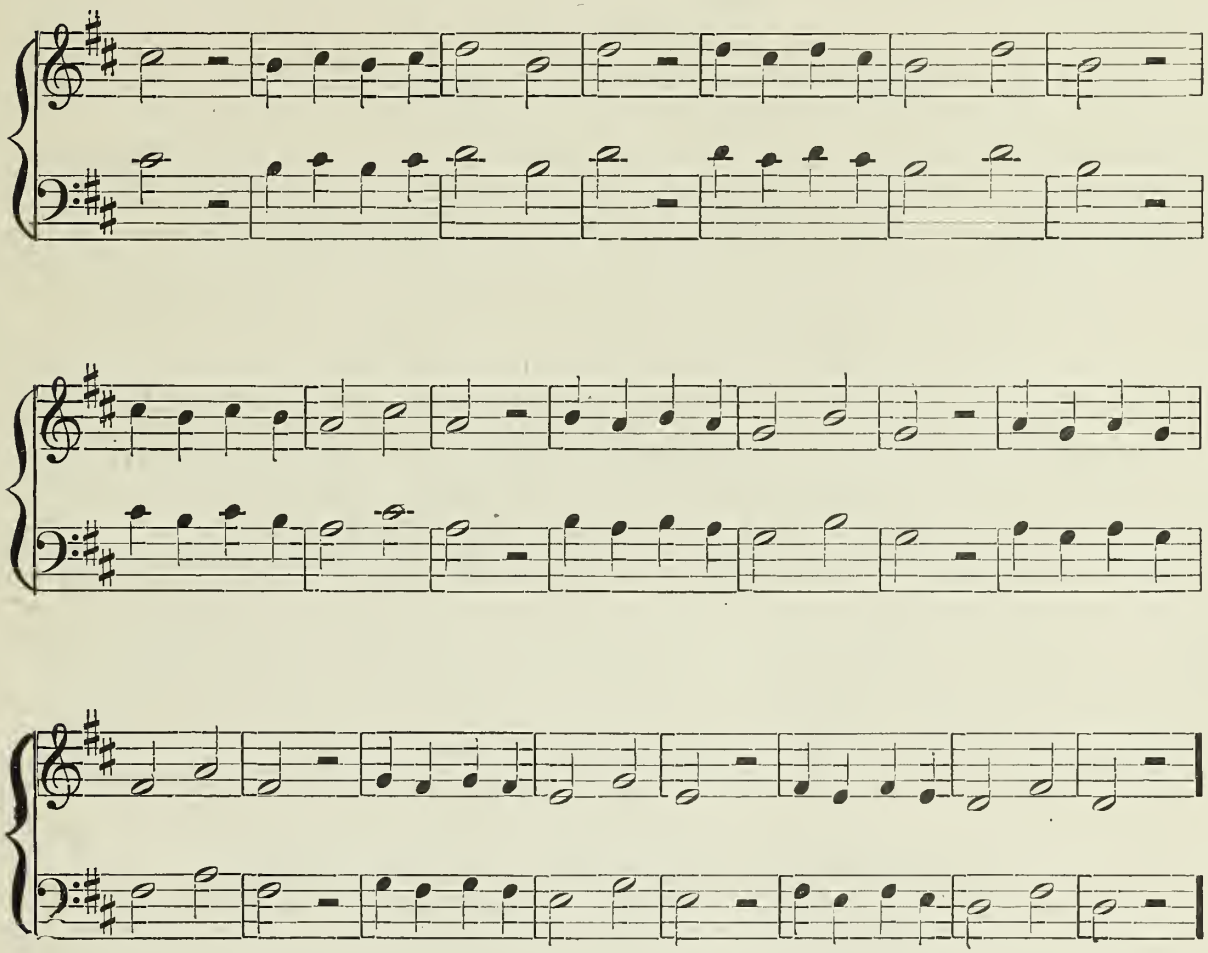
Study Ex. 82 as follows: Say the numbers in time at 𝅗𝅥 = 84, observe carefully the time signature; spell and play it in all minor keys, melodic form, beginning with D-minor.

Study Ex. 190 Solfeggio Book No. 2, according to the directions for Ex. 188 in last lesson. Study Ex. 167 Solfeggio Book No. 2, as follows: Say the numbers in time, (♩ = 80) analyze it with care and sing it until rhythm and intonation are perfect; Spell and play it in D, E, & B minor.

Thirds and Seconds.

Ex. 82.





LESSON XXIII.

Thirds in Major and Minor Mode, Rhythm.

Analyze and sing Ex. 35, Sol. Bk. No. 1, as it is written: Play it in all the major keys. Write the same Ex. in C-minor, harmonic form; analyze and sing it; change it to dotted rhythm by dotting the first note in every measure and changing the second note to an eighth; make also the necessary changes in the rests; spell and play this exercise, as thus arranged, in all minor keys, sing it in several keys which are convenient to the voice.

Study Ex. 156, Sol. Bk. No. 2, as follows: Say the numbers to the first division in time with the metronome, (♩= 60); when thus learned study each succeeding division in like manner, then learn to sing the whole exercise with correct rhythm and intonation.

LESSON XXIV.

The same Subjects Continued.

Analyze and sing Ex. 36, Sol. Bk. No. 1, as it is written. Spell and sing it in G-minor, harmonic form; Play it in all sharp keys in minor and all flat keys in major. Sing Ex. 37, Sol. Bk. No. 1, as it is written, spell and sing it in the tonic or paralell minor, harmonic form: Sing it *Alla Breve* in both major and minor, Metronome 𝅗𝅥 = 69. Write the same Ex. in dotted rhythm by making the proper changes in all the measures containing quarter notes; leave the half notes unchanged; say the numbers and sing it, metronome ♩ = 100; ♩ = 112; ♩ = 120; 𝅗𝅥 = 80; 𝅗𝅥 = 100. Write the same exercise in $\frac{2}{4}$ rhythm using the same number: measures: (16). Say the numbers and sing it thus: metronome ♩ = 120. Write it in $\frac{2}{4}$ rhythm using only half as many measures: Say the numbers and sing it in the latter form metronome ♩ = 80. Say the numbers to Ex. 192, Sol. Bk. No. 2, Met. ♩ = 80 to 108: Use much care to give full three-fourths of a beat to the dotted notes; sing it in perfect tune and rhythm, Met. ♩ = 80 to 108.

LESSON XXV.

Fourths in Major and Minor Mode, Rhythm.

Analyze and sing Ex. 65, Sol. Bk. No. 1, as it is written; spell and play it in all major keys: Write it in C-minor, harmonic form. Ex. 65, when written in minor, will introduce the diminished fourth on the seventh degree of the scale; (3 – 7). Mark all the augmented seconds and diminished fourths with a bracket; analyze and sing it thus with care as to the intonation of these intervals; spell and play it in all minor keys. Write the same Ex. in C-minor, melodic form, remembering to use the pure form commencing at measure 15; analyze and sing it; spell and play it in all the minor keys.

Say the numbers to Ex. 193, Bk. No. 2, Met. ♩ = 108 to 120. Sing it at the same speed.

LESSON XXVI.

The same Subject Continued.

Analyze and sing Ex's. 66 & 67 Sol. Bk. No. 1, as they are written. Spell and play Ex. 66 in all major keys. Spell and play Ex. 67 in all minor keys, harmonic form.

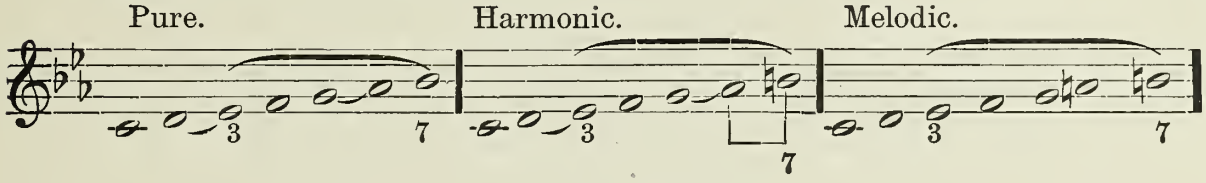
Analyze and sing Ex's. 173 & 172 Sol. Bk. No. 2, as they are written; spell and play them in all minor keys.

LESSON XXVII.

Fifths, in Major and Minor Mode, Rhythm.

The minor mode contains one augmented fifth found on the third degree of the melodic and harmonic minor scales. Fig. 46 shows the fifth, 3 – 7 in the pure minor scale as a perfect fifth and that it is increased a half-step in both the harmonic and melodic forms by raising the seventh degree a half step, thus producing an augmented fifth.

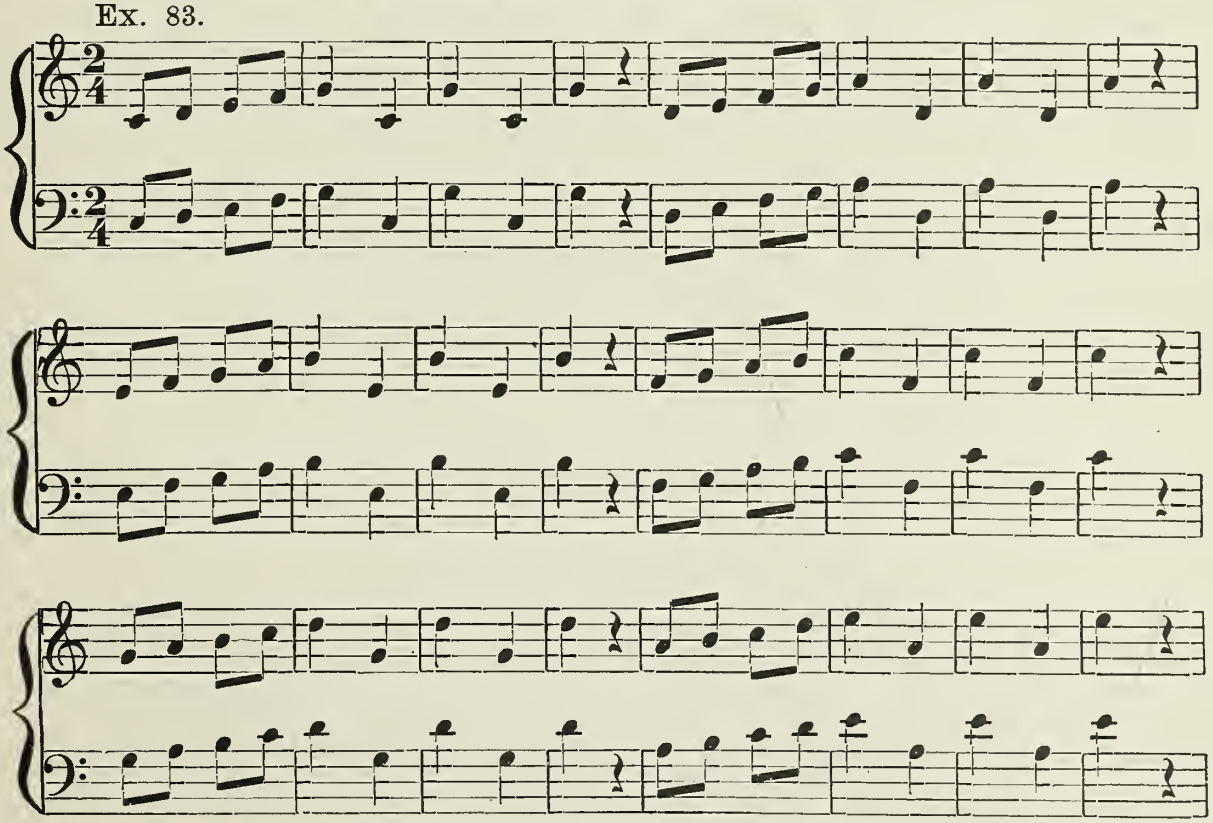
Fig. 46.

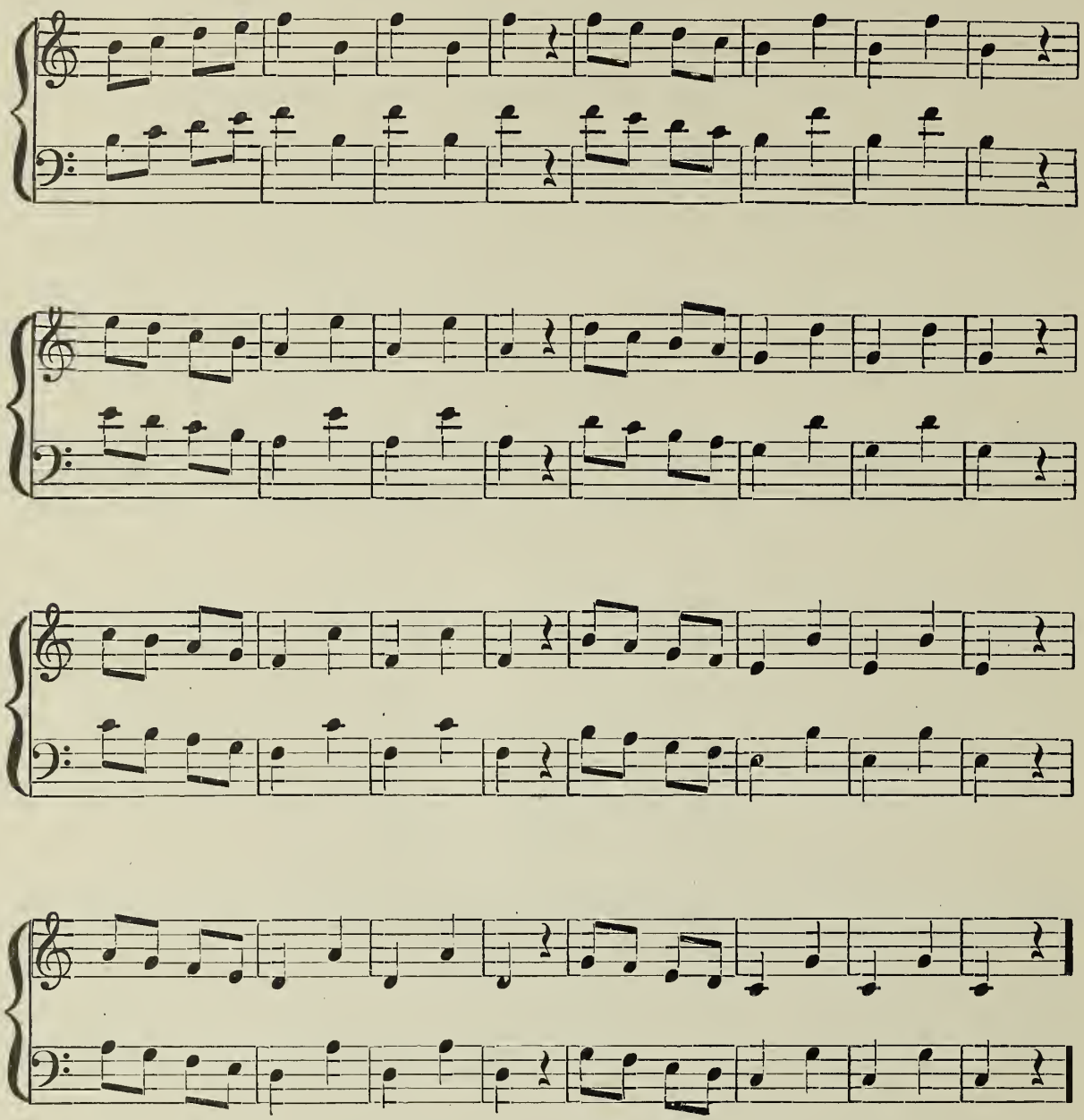


Say the numbers, analyze and sing Ex. 83 as it is written. Write it in B-minor, harmonic form, mark the augmented fifths and augmented seconds with a bracket, analyze and sing it with particular care: Spell and play it in all minor keys. Write the same exercise in A-minor, melodic form, analyze and sing it with special care as to the intonation, spell and play it in this form in all minor keys.

Fifths, Fourths, Seconds.

Ex. 83.





LESSON XXVIII.

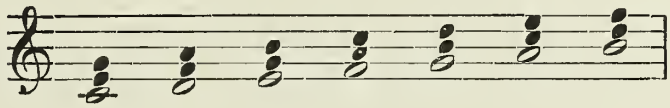
The same Subject Continued.

Analyze and sing Ex's. 85 & 86, Sol. Bk. No. 1 as they are written. Write Ex. 85 in G-minor, harmonic form, analyze and sing it; spell and play it in all minor keys. Spell and play Ex. 86 in all major keys. Study Ex. 157 Sol. Bk. No. 2, according to the directions for Ex. 156. (See Lesson XXIII).

LESSON XXIX.

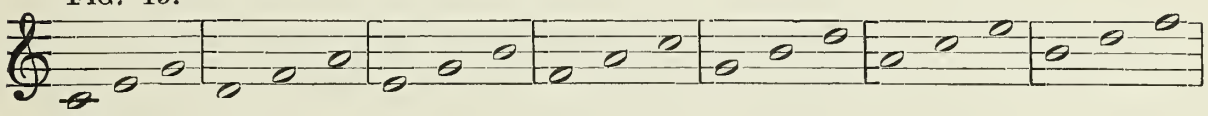
Triads Major, Minor and Diminished.

A triad is a chord composed of three tones which are usually consonant with each other; such chords can be built upon any tone of the major or minor scale; the triads of the major scale will be first considered.

FIG. 44. 

It will be seen from Fig. 44 that these chords are composed of thirds and fifths; viz. 1 – 3 is a major third, 3 – 5 a minor third and 1 – 5 a perfect fifth. When a triad is composed of a major and a minor third the fifth thus formed is perfect and the triad is major or minor according to the order in which the thirds appear: If the *lower* third is major, then the triad is major: If the *lower* third is minor, then the triad is minor: When both triads are minor the fifth thus formed is a diminished fifth and the chord is called a diminished triad. Triads may also appear in the form of broken chords as in Fig. 45.

FIG. 45.



An analysis of Fig. 45 will show that the triads on the 1st., 4th., & 5th. degrees of the scale are major, those on the 2nd., 3rd., & 6th. degrees are minor, that on the 7th. degree diminished. All these triads find an illustration in Ex. 88, Sol. Bk. No. 1: Analyze this Ex. as follows; 1 – 3 – 5, major triad; 5 – 1 – 1 – 5 – 5 – 1, perfect fifths, etc.: Analyze and sing this Ex. with great care, write and sing it in the keys of B♭, C, D♭, & D-major: Spell and play it in all other major keys.

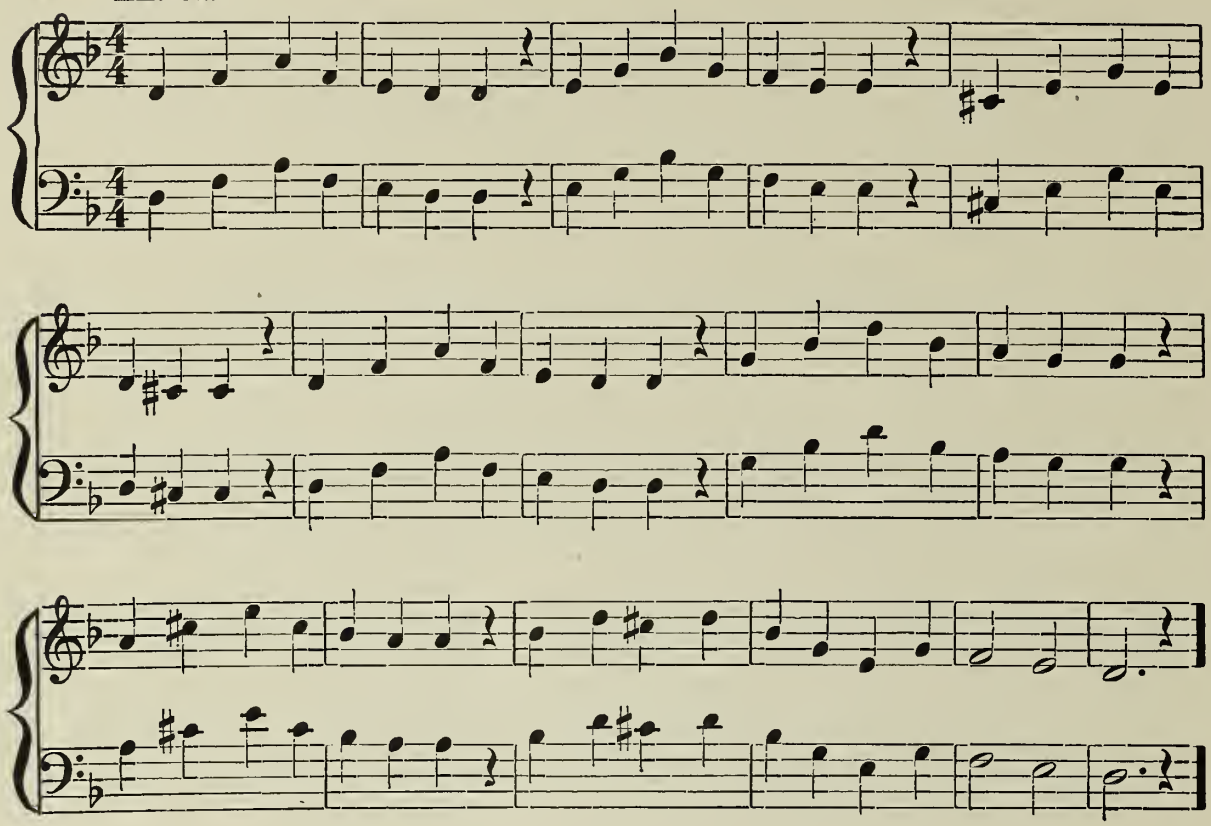
LESSON XXX.

The same Triads in the Minor Mode.

Analyze Ex. 84 with special care: In the fifth measure analyze thus; sharp 7 – 2 – 4, diminished triad, etc. When all the intervals are clearly seen attempt to sing it. See that the intonation is exactly correct at the diminished triad in the third measure.

Triads, Major, Minor and Diminished.

Ex. 84.



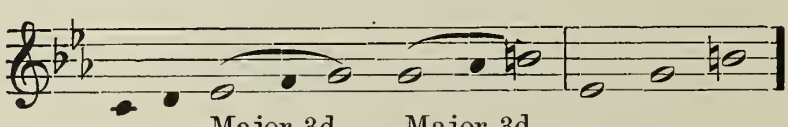
Having learned Ex. 84 according to the foregoing directions, spell and play it in all minor keys, harmonic form. Study Ex. 158, Sol. Bk. No. 2, according to previous directions.

LESSON XXXI.

The Augmented Triad.

The triad on the third degree of the scale is composed of two major thirds and is therefore, an augmented triad.

Fig. 47.

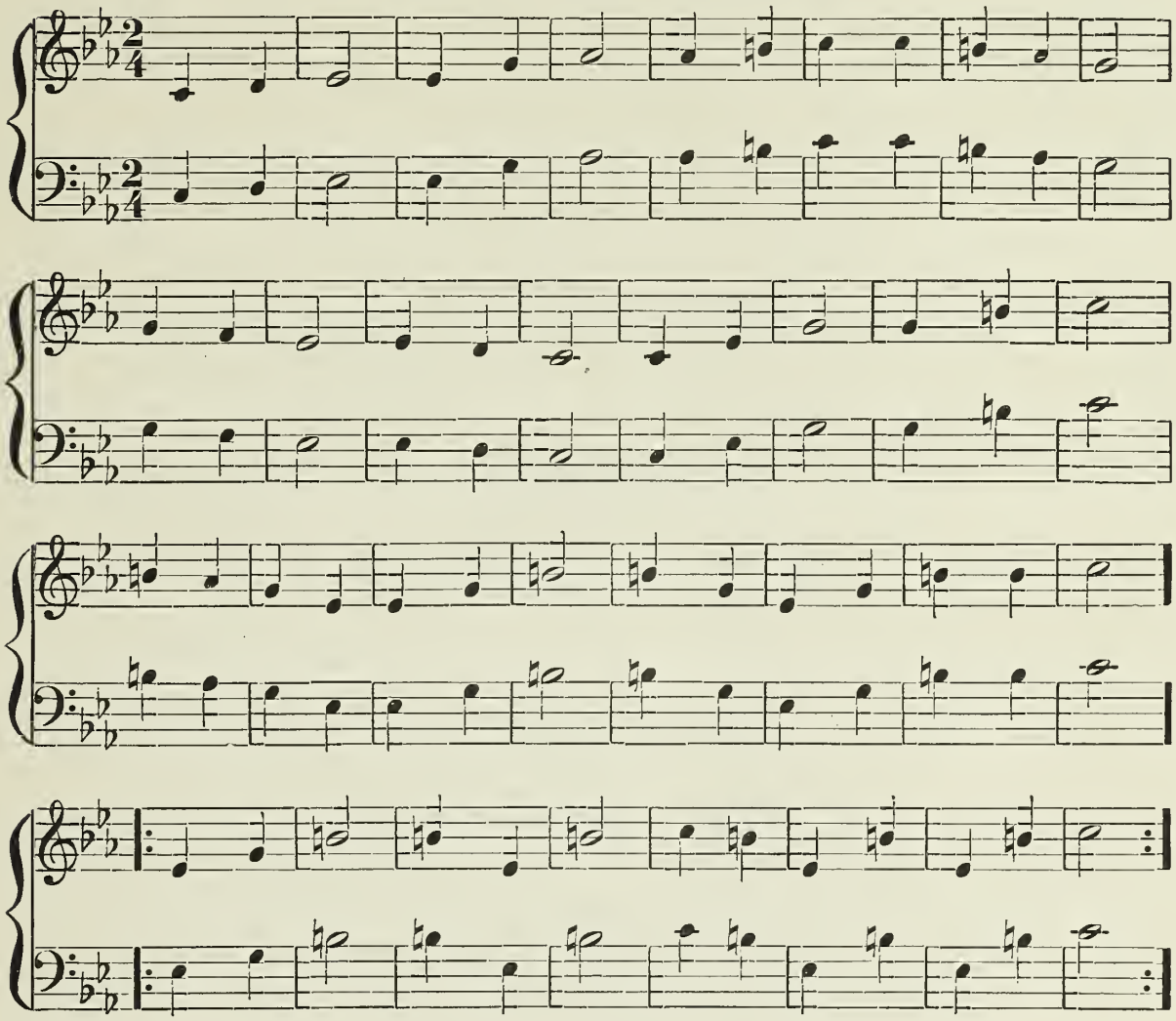


Major 3d. Major 3d.

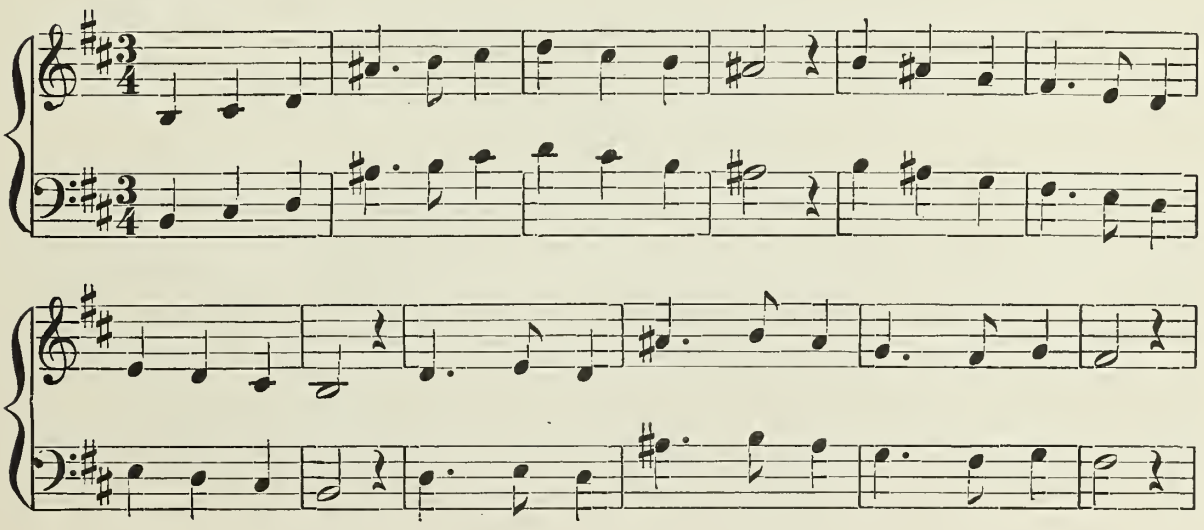
Analyze and sing Ex. 85 &86 with great care, as to the intonation of the leading-tone: Spell and play them in all minor keys. Analyze and sing Ex's. 169 & 171, Sol. Bk. No. 2.

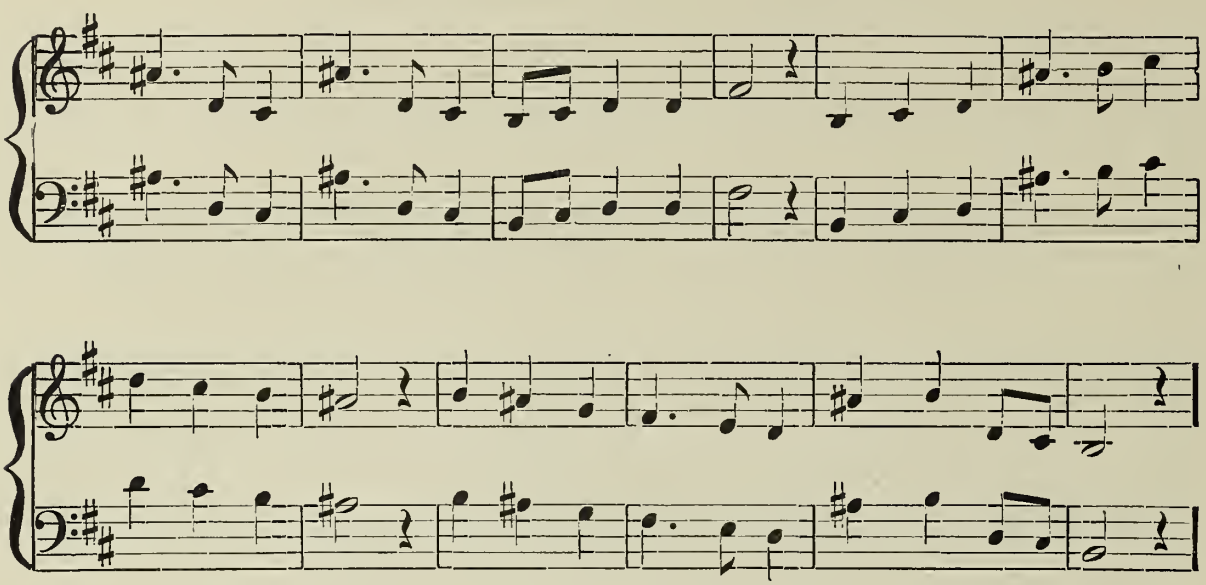
Augmented Fifths and Seconds.

Ex. 85.



Ex. 86.





LESSON XXXII.

Sixths, Major and Minor.

Analyze and sing Ex. 97, Sol. Bk. No. 1: Write it in C-minor harmonic form; analyze and sing it; spell and play it in all sharp keys in major and in all flat keys in minor, harmonic form. Study Ex. 98, Sol. Bk. 1, in precisely the same manner. Study Ex. 159 Sol. Bk. 2, according to previous directions.

LESSON XXXIII.

Sixths Continued.

Ex's. 111 & 112 Sol. Bk. 1, show the sixth in its relation to the third and octave: Analyze and sing these with much care: Write them in C-minor, melodic form, remembering to restore the sixth and seventh degrees when the exercise descends the scale: Analyze and sing these exercises in this form with still greater care. Spell and play Ex. 111 in all major keys, Ex. 112 in all minor keys, melodic form. Ex. 105, Sol. Bk. 1, is more melodious in character than the preceding exercises: Analyze and sing it as it is written, spell and play it in many major keys.

LESSON XXXIV.

Sevenths, Major and Minor.

Analyze and sing Ex. 115, Sol. Bk. 1: When it is learned as it is written sing it Alla Breve, Met. $\mathbb{d} = 80$, with careful attention to the intonation. Analyze and sing Ex. 116, Sol. Bk. 1, as it is written with continous attention to the intonation: Spell and play it in all major keys. Ex. 117, Sol. Bk. 1, shows the seventh mediated by thirds: Analyze it with reference to the broken chords, thus: 1 – 3 – 5 – 3 – 1, major triads; 7 – 2 – 4 – 6 minor seventh chord; Where the chord occurs in other than the form of thirds, it may be ignored for the present and analyzed by its separate intervals: (See measure 15). After the analysis is well learned, sing it with the most careful attention to the intonation of the sevenths.

LESSON XXXV.

The Diminished Seventh.

The diminished seventh, like the diminished fifth, is found on the leading-tone of the minor scale and is one-half step smaller than the minor seventh. Ex. 181, Sol. Bk. 2, displays this interval in its proper place, on the leading-tone of the scale of F-sharp-minor and contrasted with both major and minor sevenths: Analyze the first four notes of this Ex. and when the intervals are understood sing them at least twenty times in succession with the most careful attention to the intonation: Write these intervals in all the minor keys with the proper signature and accidental; sing them in each key until there is no longer any difficuly in giving the exact intonation to this interval in any key. The above directions having been faithfully carried out, the entire Ex. may be analyzed and sung: Note also the somewhat unusual time-signature. Analyze and sing Ex. 178, Sol. Bk. 2: Spell and play it in all minor keys.

LESSON XXXVI.

The same Subject Continued.

Analyze Ex. 180, Sol. Bk. 2, until each interval can be quickly recognized: Note the compound measure; viz. six-eight, compounded from two measures of three eight time, with the primary accent on the first beat and the secondary accent on the fourth beat. Sing this Ex. with great care and increase the speed from $\mathbb{e} = 80$ to $\mathbb{e} = 112$: Spell and play it in C and E-minor.

In Ex. 179, Sol. Bk. 2, the diminished seventh will be found as a chromatic interval, viz. on another tone than the leading-tone: this will not be difficult if the foregoing Ex's. have been thoroughly learned. Analyze this Ex., say the numbers, (Met. $\mathbb{d} = 72$) and sing it until a perfectly smooth and tuneful rendering can be given.

LESSON XXXVII.

Octaves, Rhythm.

Analyze and sing Ex. 132, Sol. Bk. 1, with care to keep it in the key of C-major, as there will be a tendency to make a tonic of the first note of each phrase: When it is thoroughly learned as it is written, sing it Alla Breve, Met. 𝅗𝅥 = 80: Sing it in C-minor, harmonic form, in the same rhythm in which it is written and with special attention to the intonation: Sing it also in C-minor Alla Breve, Met. 𝅗𝅥 = 72. Write the same exercise in two-four $\left(\frac{2}{4}\right)$ rhythm changing all the quarter notes to sixteenths and the half notes to eighths: Say the numbers in correct time, Met. ♩ = 66: Sing it in this form until a finished performance can be given; play it in both major and minor in all the rhythms indicated above.

LESSON XXXVIII.

The same Subjects Continued.

Analyze and sing Ex. 134, Sol. Bk. 1, recognize the triads in the analysis: When well learned as it is written sing it Alla Breve, Met. 𝅗𝅥 = 100. Write it in B-minor, harmonic form, analyze and sing it thus, Met. ♩ = 84: Spell and play it in all sharp keys in major, in all flat keys in minor. Analyze and sing Ex's. 135 & 136, Sol. Bk. 1: When well learned sing Ex. 135 with one beat to a measure, Met. 𝅗𝅥. = 72 to 𝅗𝅥. = 100; Sing Ex. 136, Alla Breve, Met. 𝅗𝅥 = 88 to 𝅗𝅥 = 112.

LESSON XXXIX.

Diminished Octaves, Rhythm,

The diminished octave is a purely chromatic interval; viz. it is not found in any major or minor scale but is created by diminishing a perfect octave one half-step. Ex. 129, Sol. Bk. 1, contains several illustrations of the dim. octave: Analyze and sing this Ex. with special attention to the intonation; play it in all major keys. Study Ex. 189, Sol. Bk. 2, as follows: Say the numbers in perfect time, Met. ♩ = 60; The sixteenth rests may be said aloud until it becomes easy to feel the time which belongs to them after which they should be observed in silence and the notes said in perfect rhythm. After Ex. 189 has been correctly sung it may be played at a rate of speed beginning at ♩ = 60 and increasing to ♩ = 84.

LESSON XL.

Review and Examination.

LESSON XLI.

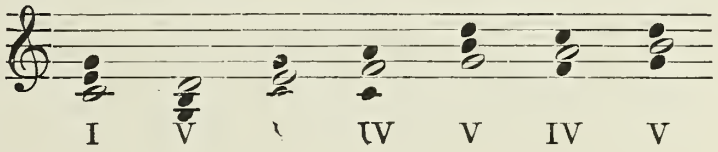
Principal Triads.

The triads of the major and minor scales have been hitherto considered as a whole; they have also been represented by tones which are separated from each other by the interval of a third: When chords appear thus they are said to be in their fundamental form because the lowest tone is the root of the chord and the other tones receive their names from the interval which they form with the root, thus, the next highest tone forms the interval of a third and is called the third of the chord; the next highest tone forms the interval of a fifth and is called the fifth of the chord, so that the tones of a triad are called respectively the root, the third, the fifth.

FIG. 48.

The root of any chord may be determined by placing the tones so that they will form a succession of thirds; the lowest tone is then the root of the chord and from this tone the chord receives its name, viz. the chord of C, the chord of F, etc. (Fig. 48). The triads on the tonic (I), dominant (V), and subdominant (IV) are called principal triads and contain all the tones of the scale.

FIG. 49.

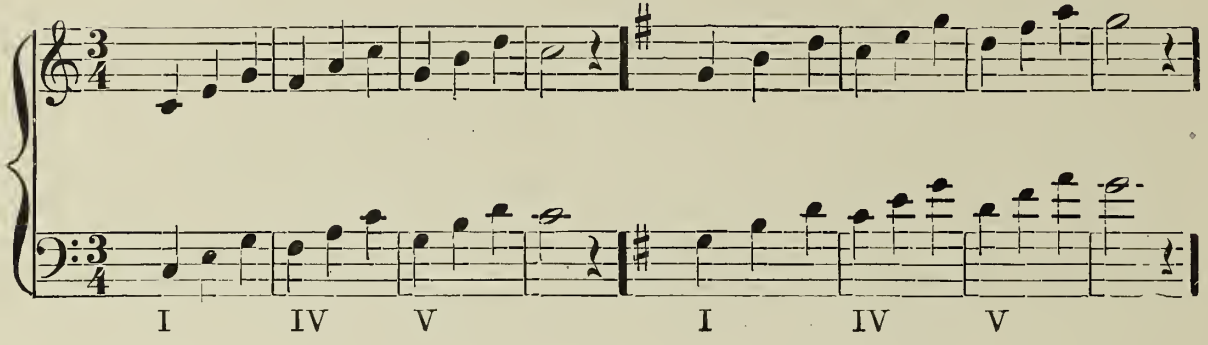


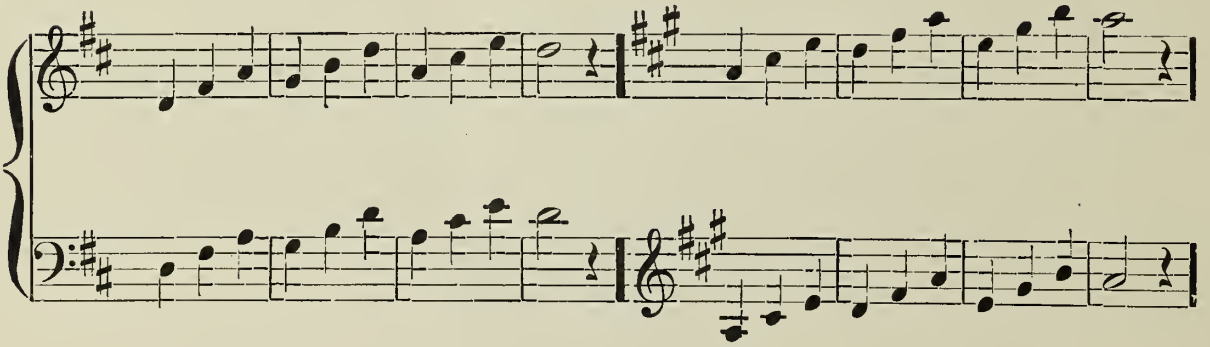
Therefore the major or minor character of these chords establishes the scale as major or minor. In Fig. 48 the principal triads of the scale of C are seen to be major, hence the scale is a major scale. Ex. 87 is a study of the principal triads of all the major keys: Fill out, neatly, the measures which are incomplete and designate the chord in each measure by the use of the *large* Roman numerals: Sing as much of it as comes within the compass of the voice; play it until it is committed to memory or until any triad in any key can be given at call without hesitation.

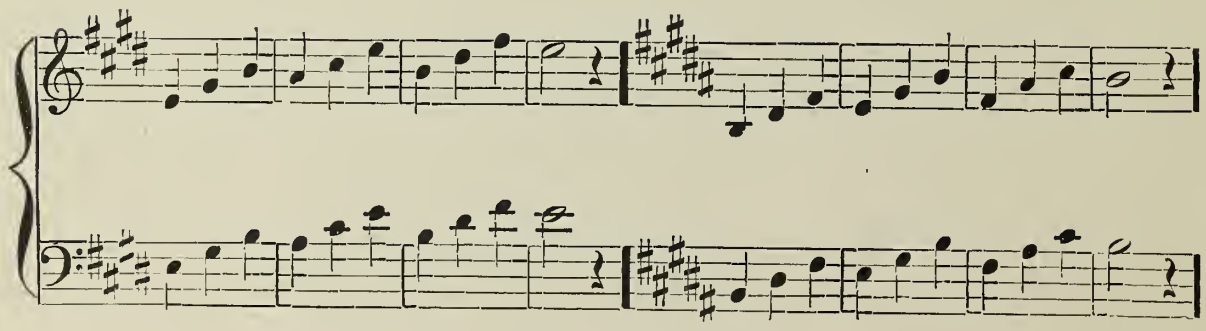
Study Ex. 194 Sol. Bk. 2, according to the directions for foregoing exercises in rhythm.

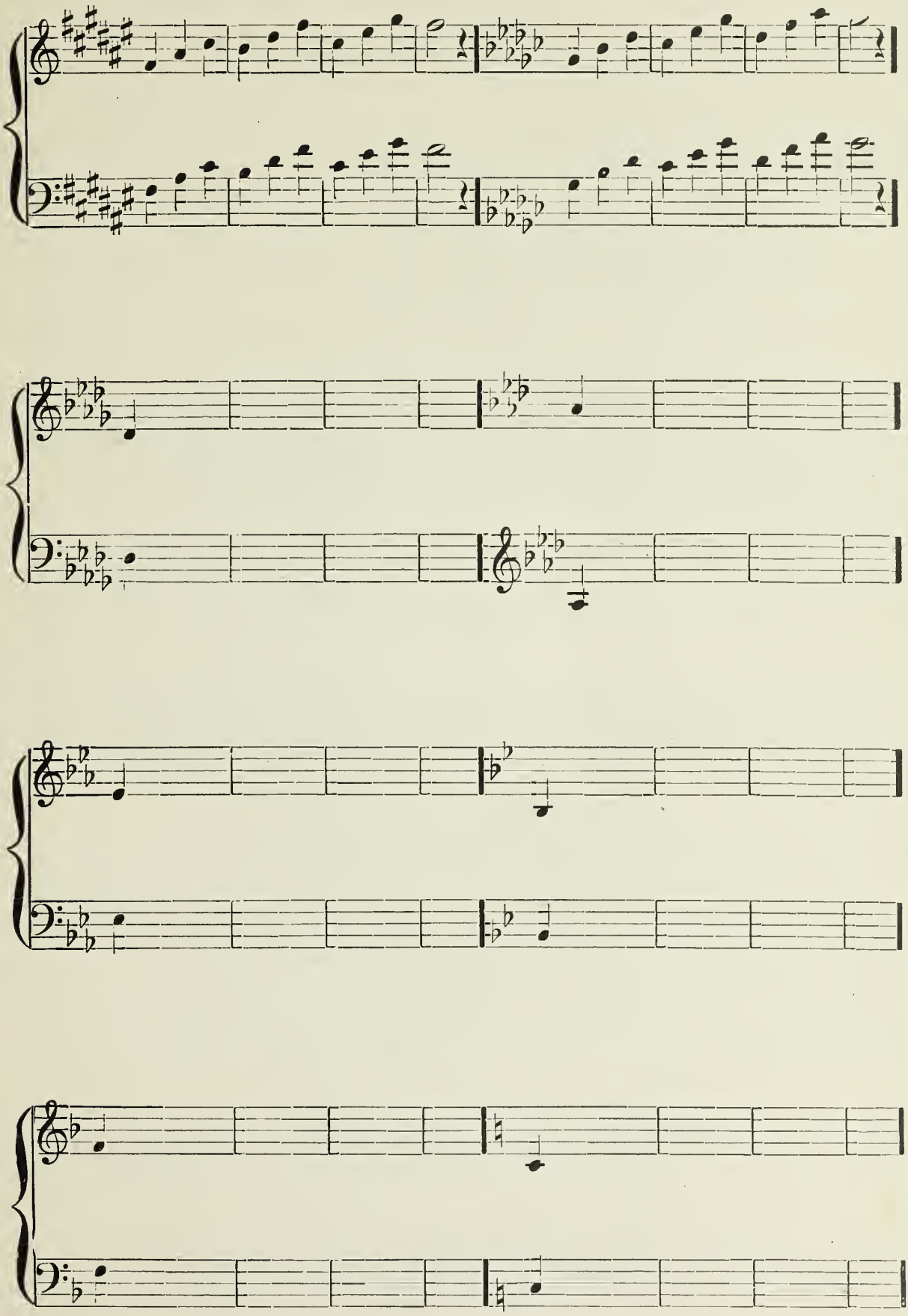
The Principal Triads.

Ex. 87.







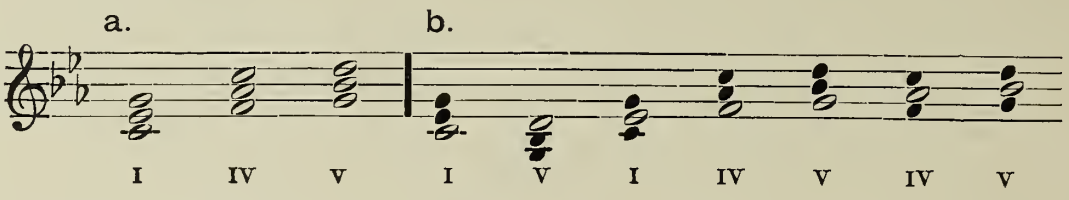


LESSON XLII.

Principal Triads in Minor.

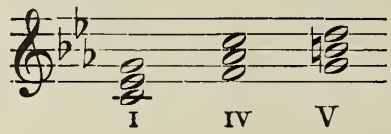
As in the major, the principal triads in minor are those on the tonic (I), the dominant (V), and subdominant (IV); these chords, also, contain all the notes of the scale. (See Fig. 50 b).

Fig. 50.



In the pure form of the minor scale the principal triads are all minor, hence the name; in the harmonic form the dominant triad becomes major by the raising of the seventh degree so that the dominant chord is major in both the major and minor modes; the pure and the melodic forms are rarely used for harmonic purposes, therefore they will be set aside for the present. Fig. 51 shows the principal triads of C-minor, harmonic form.

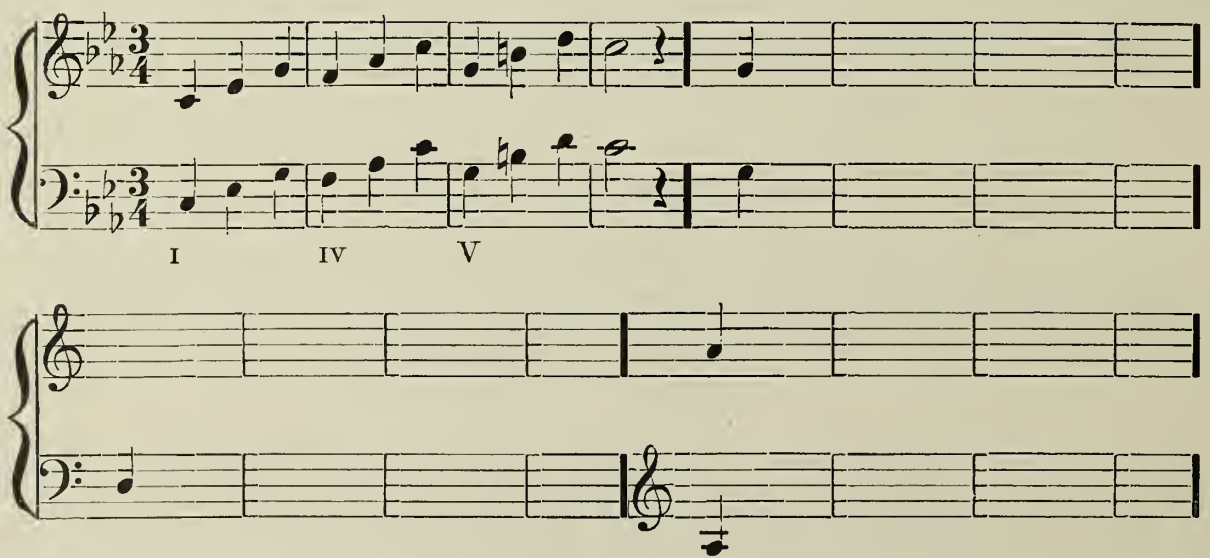
Fig 51.

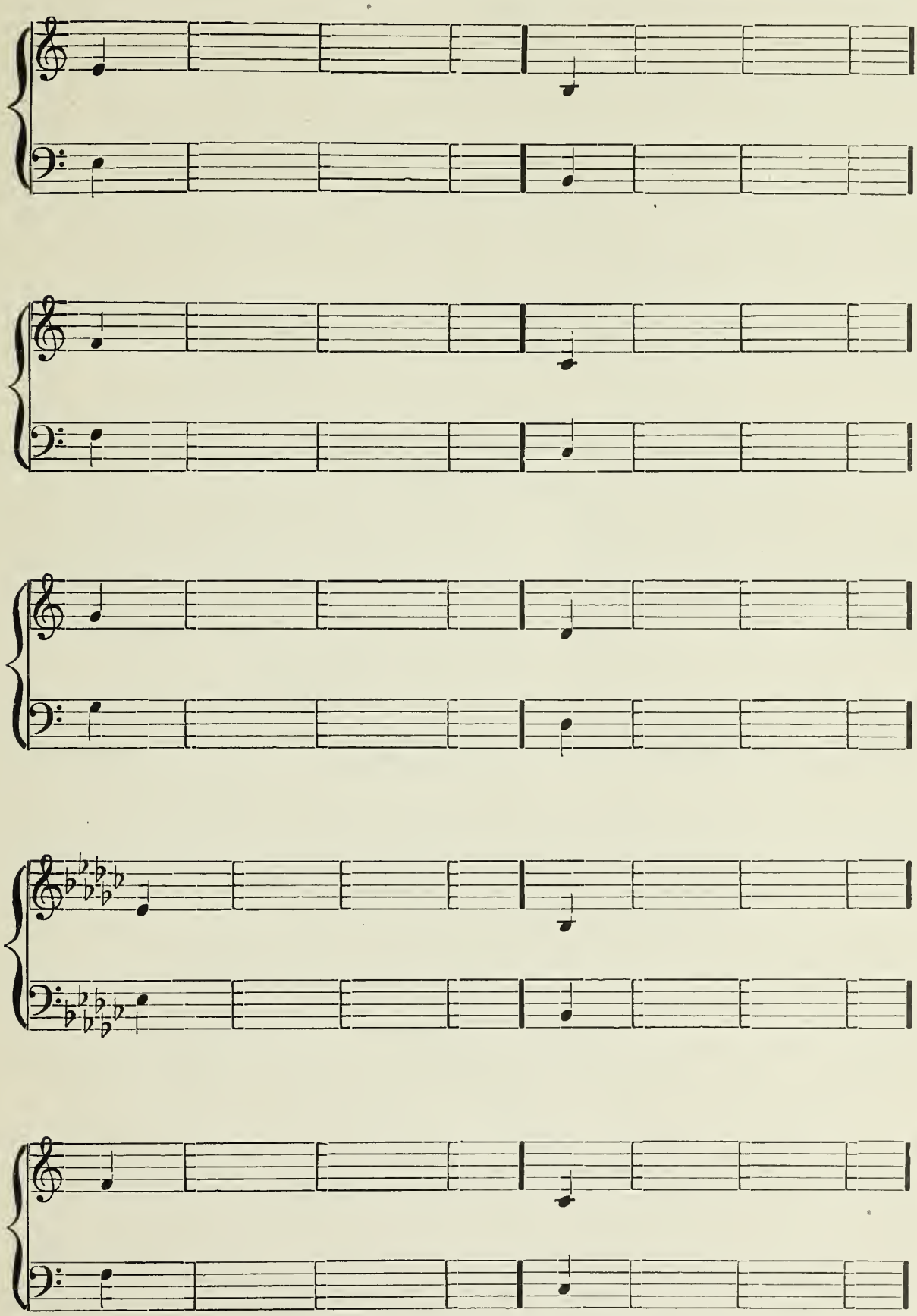


Fill out, neatly, the incomplete measures of Ex. 88 using the correct signatures and accidentals, marking each minor chord with the small, and each major chord with the largeRoman numeral. Study Ex. 195 Sol. Bk. 2, Met. $\frac{3}{4} = 72$.

Principal Triads in Minor.

Ex. 88.



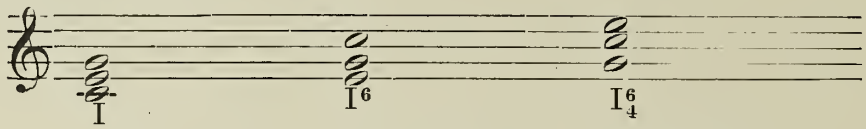


LESSON XLIII.

Inversion of Triads, Rhythm.

The triads may appear with other members than the root as the bass: [The term *bass* denotes the lowest note in the chord without regard to its pitch.] When the third is the bass the triad is said to be in the first inversion and is called the chord of the sixth; when the fifth is the bass the triad is said to be in the second inversion and is called the chord of the sixth and fourth, when the root is the bass the chords are simply designated triads thus, if the tonic triad were called for, the pupil should respond with the tones 1 – 3 – 5.

FIG. 52.



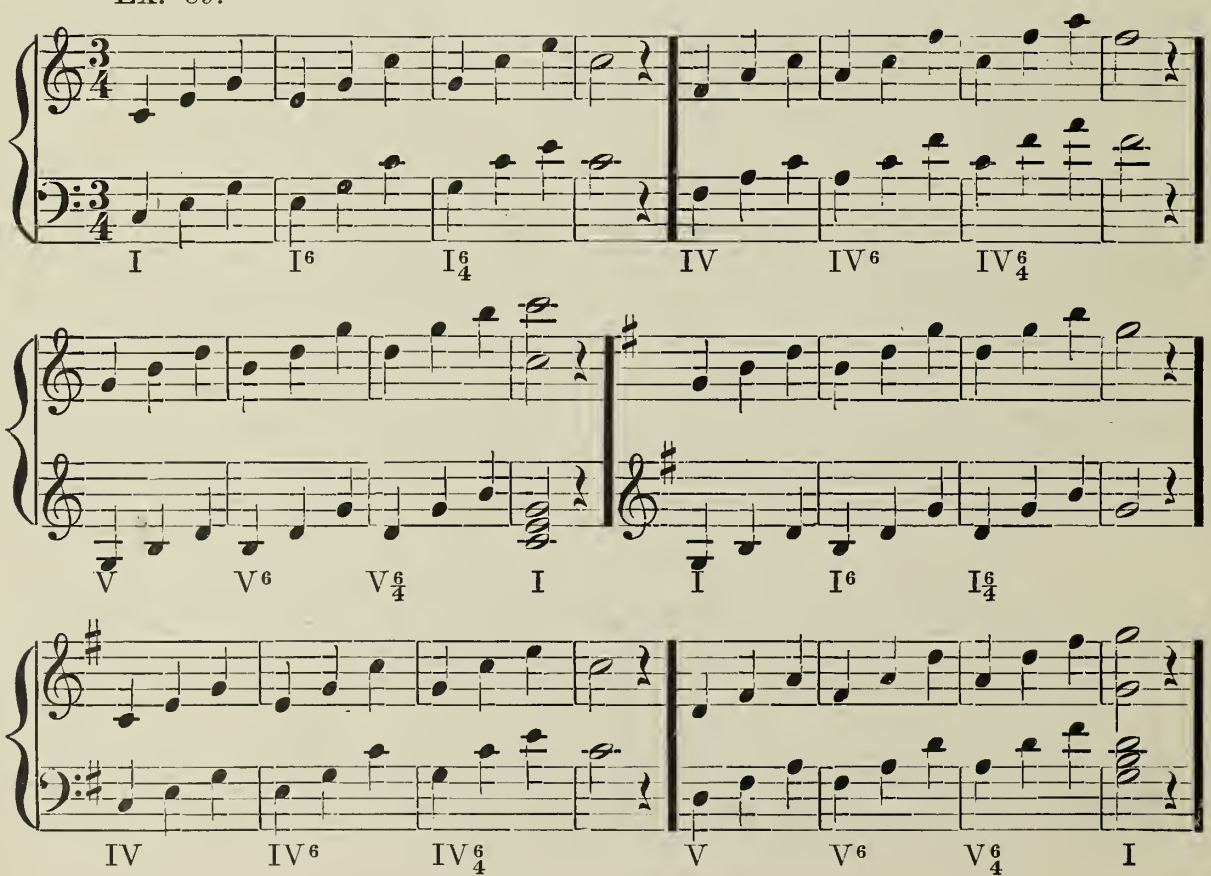
Triad. 1st Inversion. 2d Inversion.

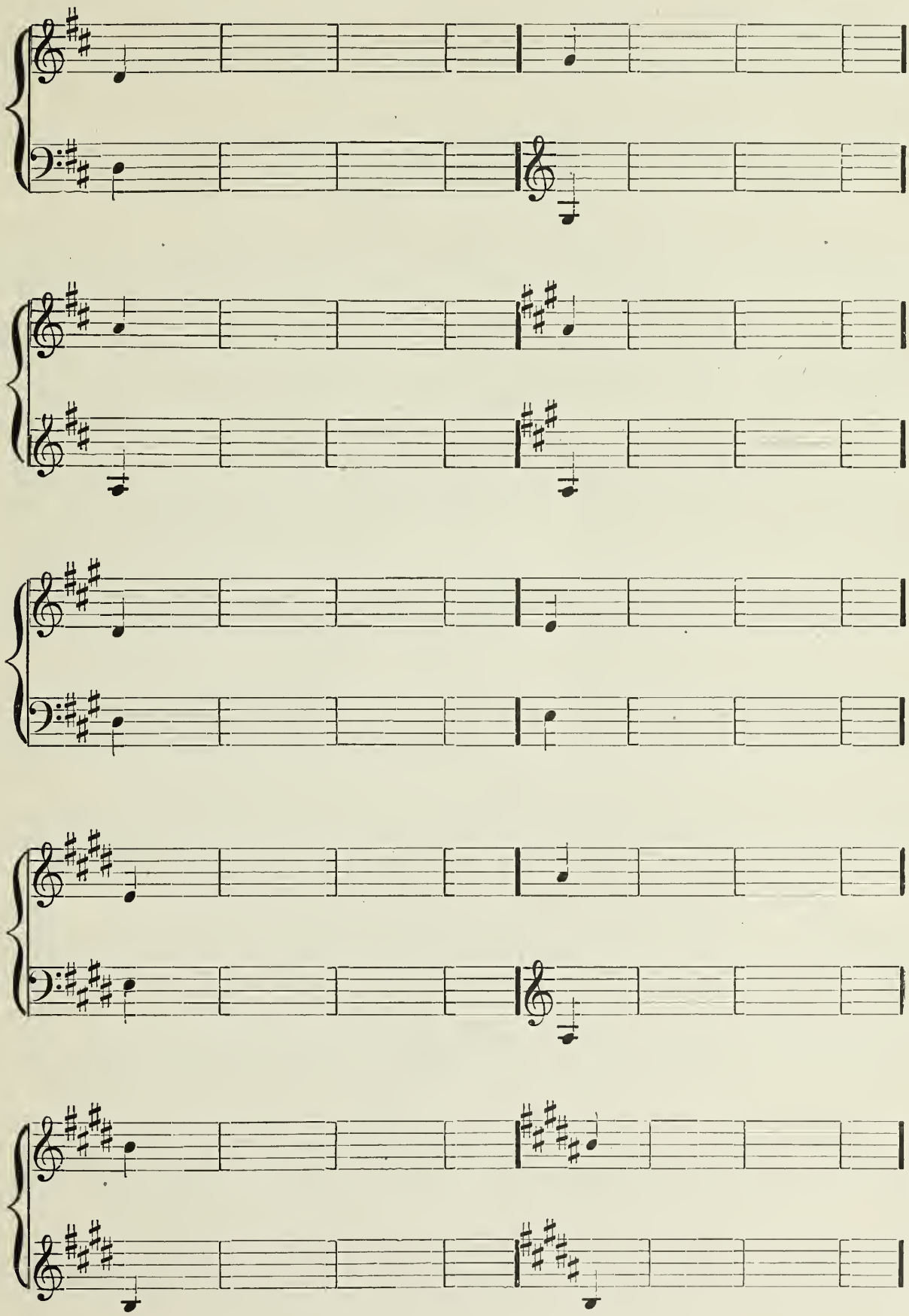
These chords are marked, in major, as in Ex. 89; in minor as in Ex. 90 and are spoken thus; tonic; tonic-six; tonic-six-four; Subdominant; subdominant-six; subdominant-six-four; dominant; dominant-six; dominant-six-four.

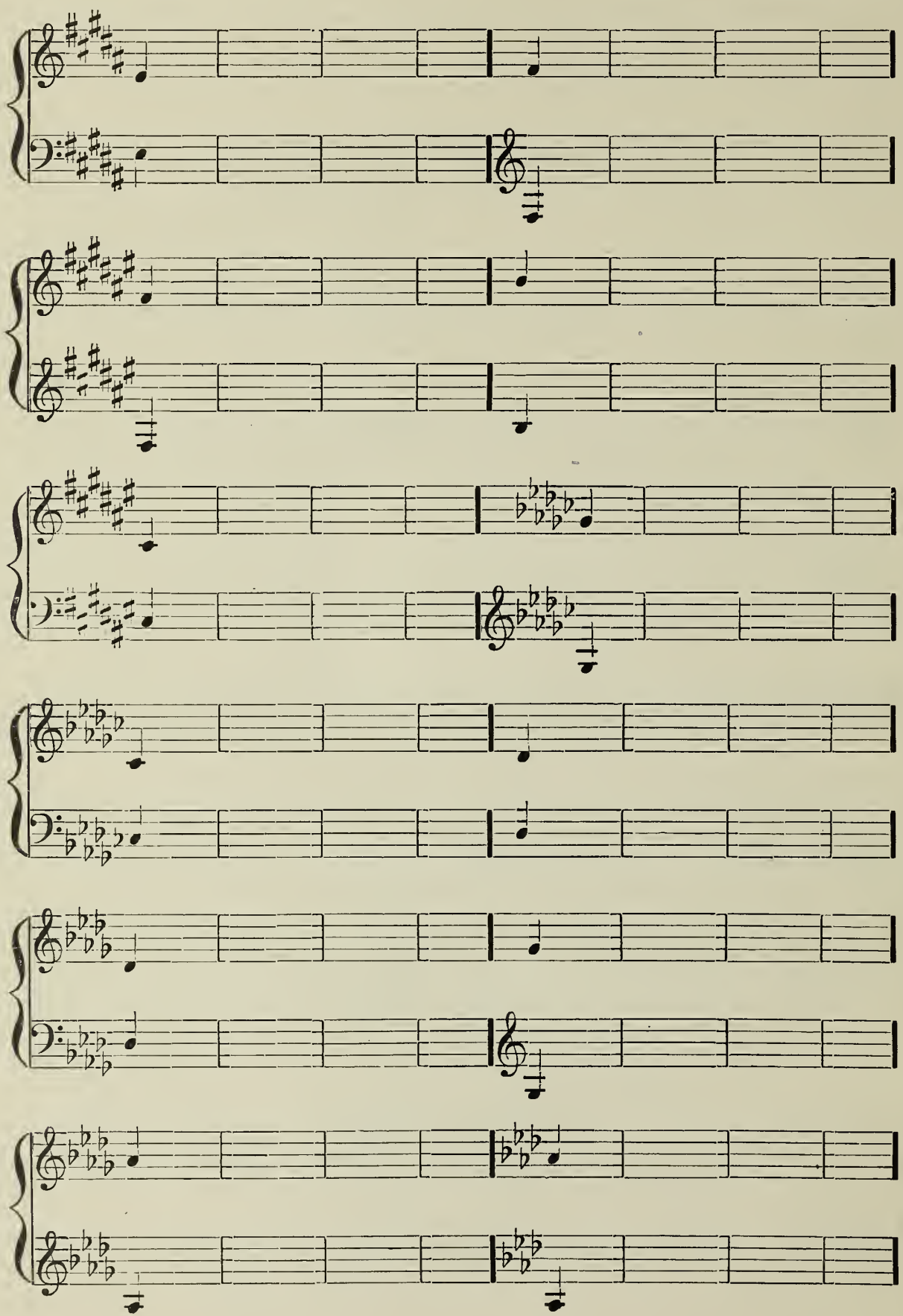
Fill out the incomplete measures of Ex. 89; mark each chord with the correct Roman numeral and study it thus: Analyze it until the intervals can be given with great rapidity; sing the divisions which come within the compass of the voice; play it until any chord can be spelled or played without hesitation. Study the triplet as explained on page 305 Sol. Bk. 2.

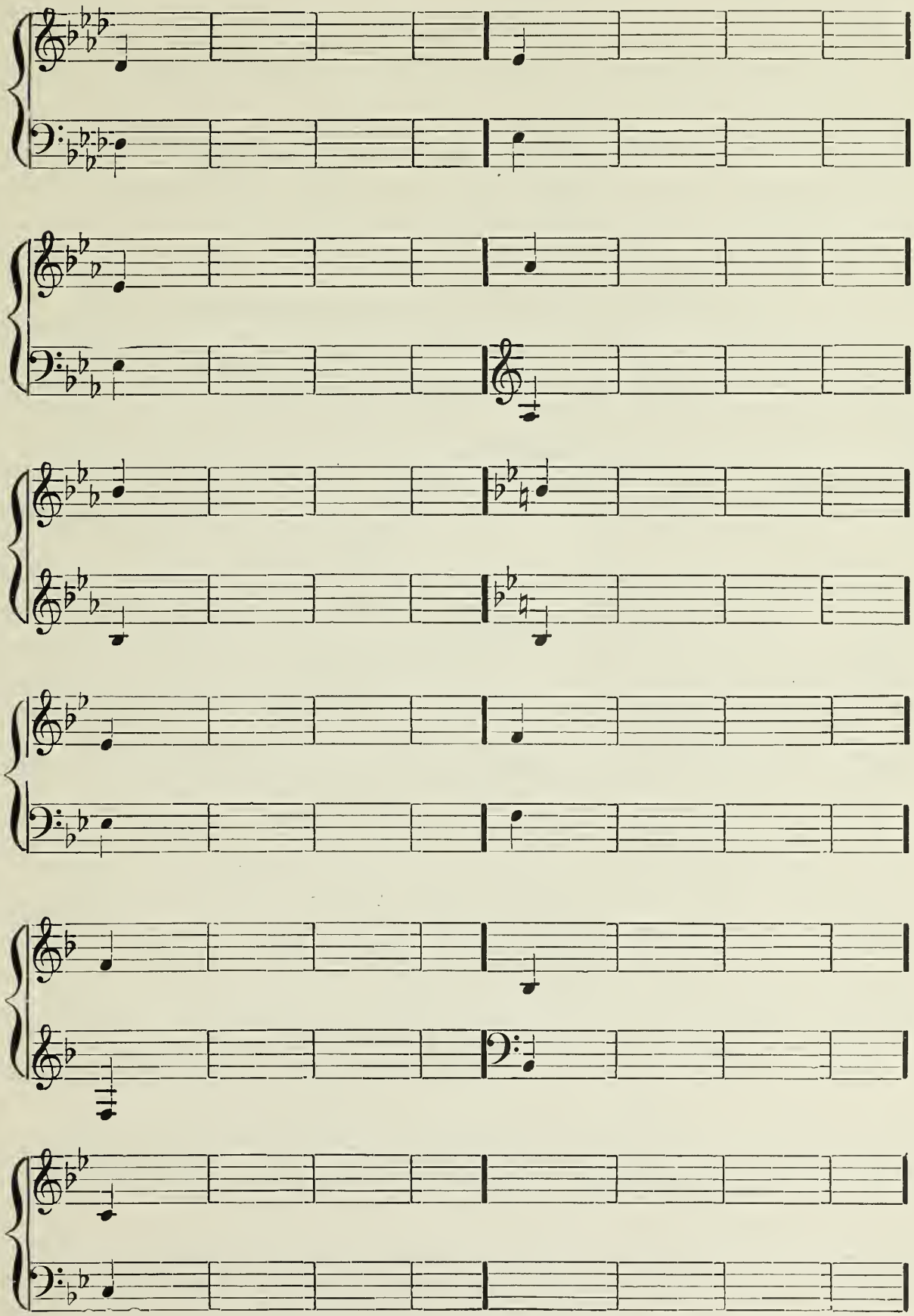
Principal Triads and Inversions.

Ex. 89.









LESSON XLIV.

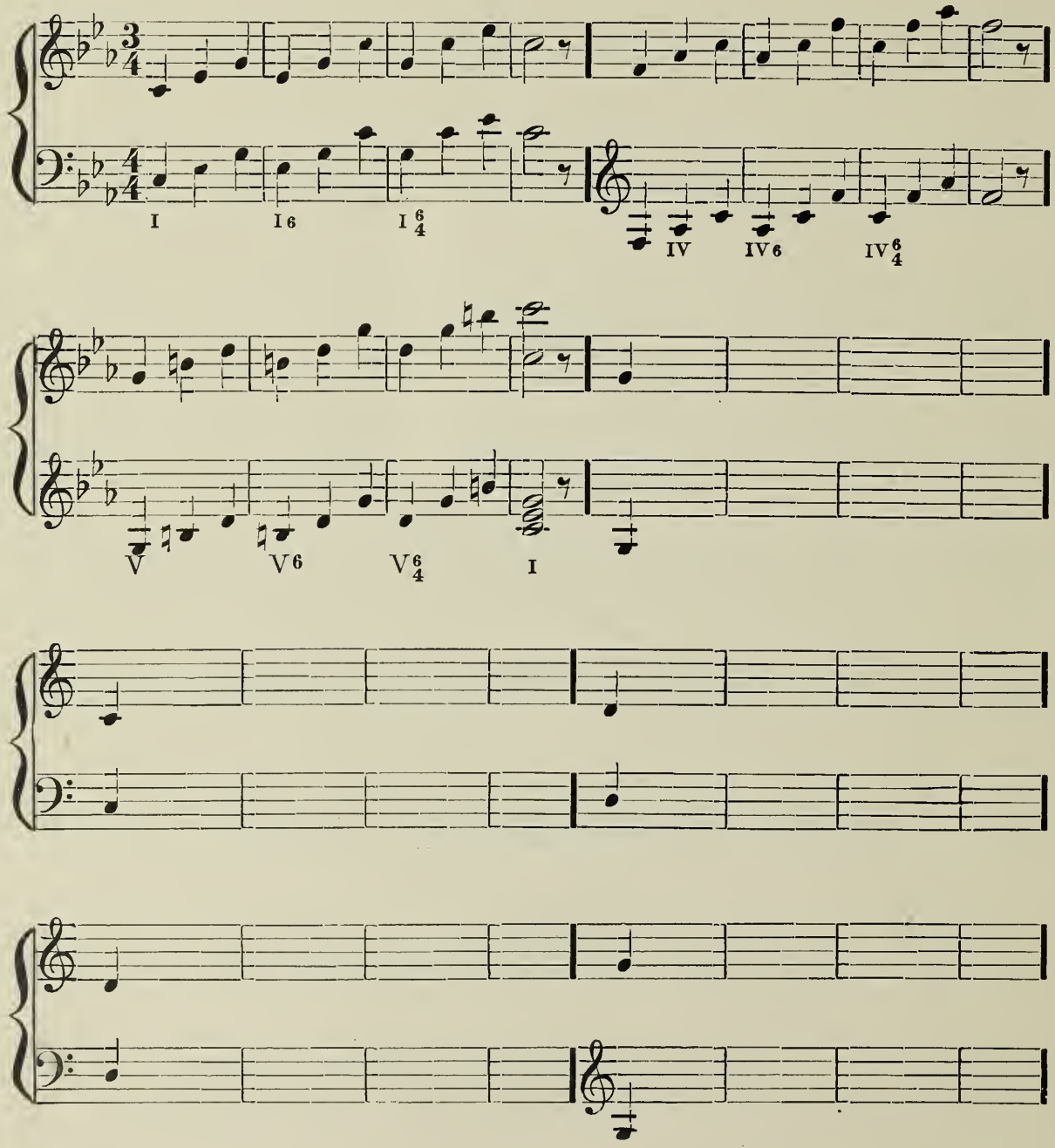
Principal Triads in Minor and Inversions, Rhythm.

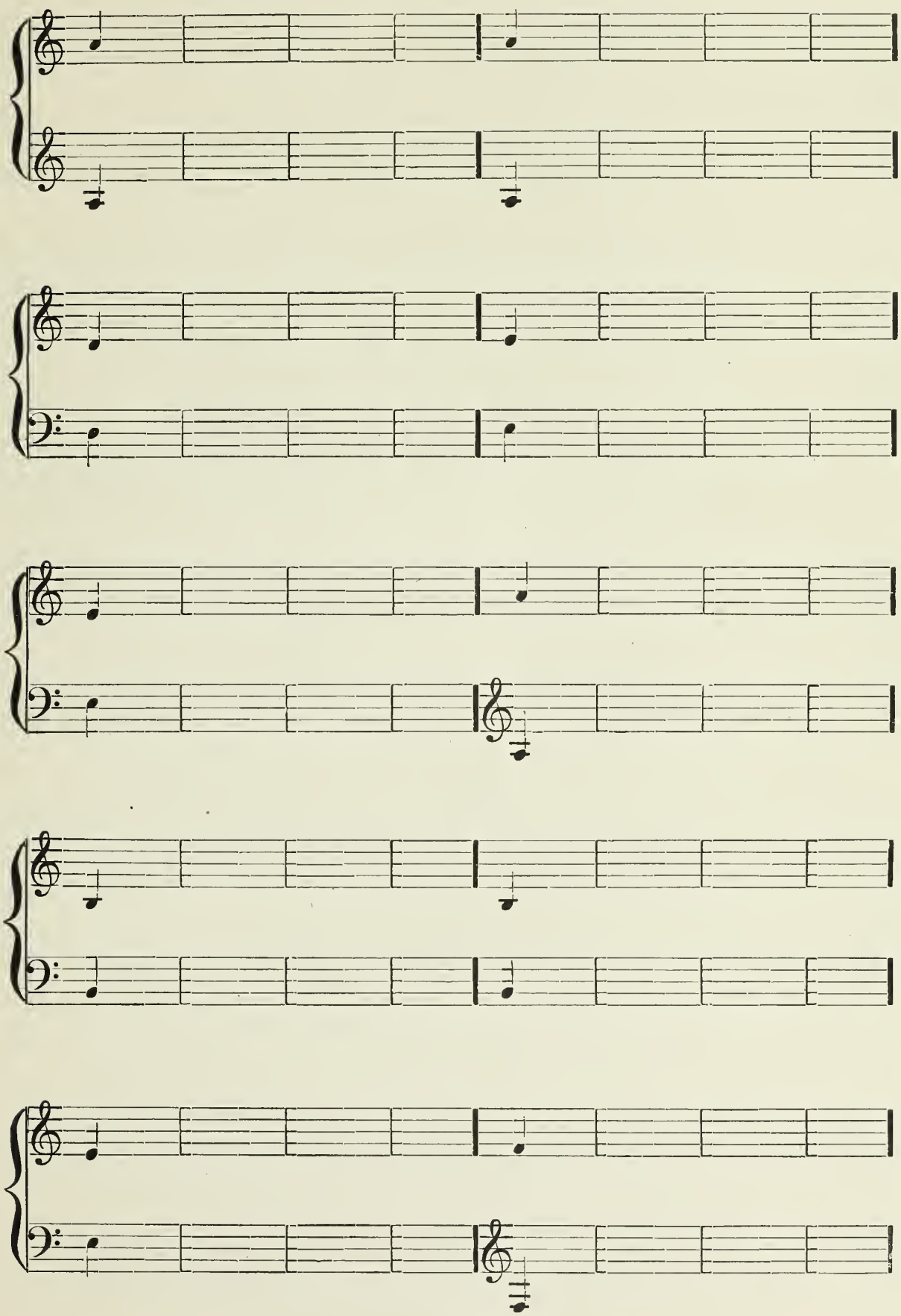
Fill out the incomplete measures of Ex. 90, using the correct signatures and accidentals, and mark each chord with the proper Roman numeral: Analyze it, sing the divisions which come within the compass of the voice, and play it until any chord in any key can be spelled or played without hesitation.

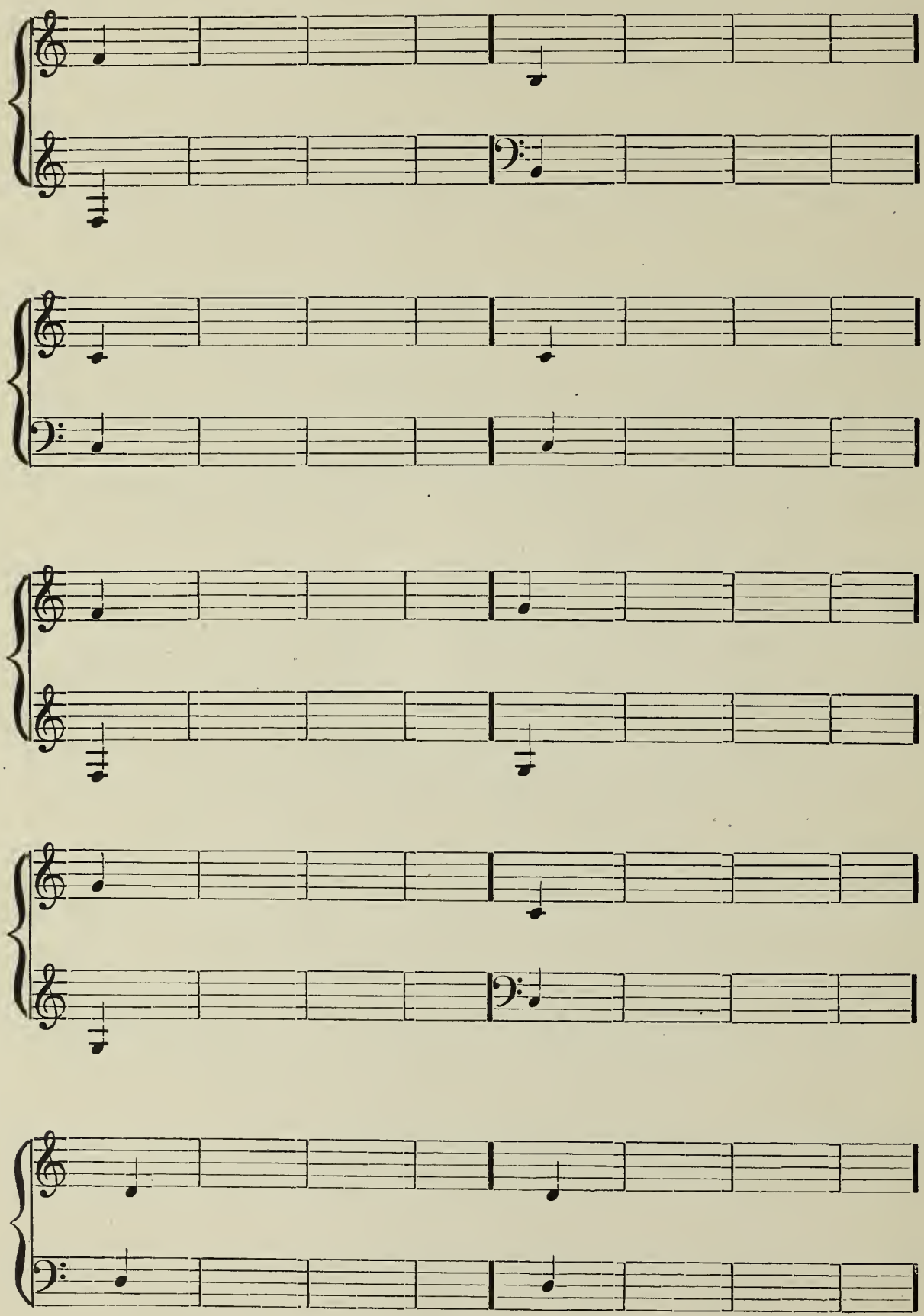
Study Ex. 196 Sol. Bk. 2, Met. ♩ = 80.

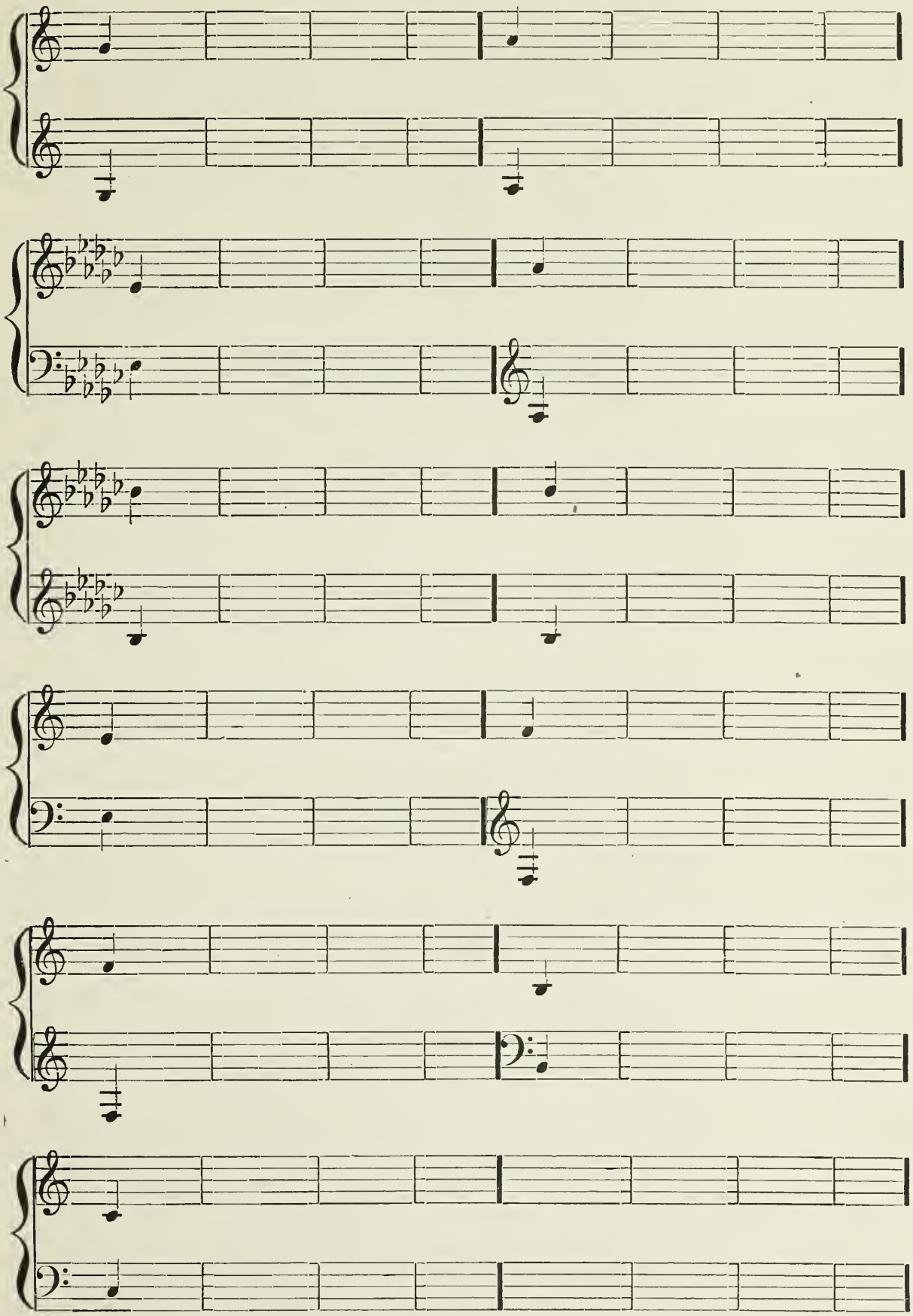
Principal Triads in Minor and Inversions.

Ex. 90.







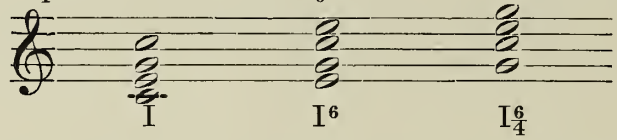


LESSON XLV.

Four-part Chords.

Triads may be changed to four-part chords by doubling any of the tones an octave higher. Four-part chords are subject to the same inversions as the triads.*

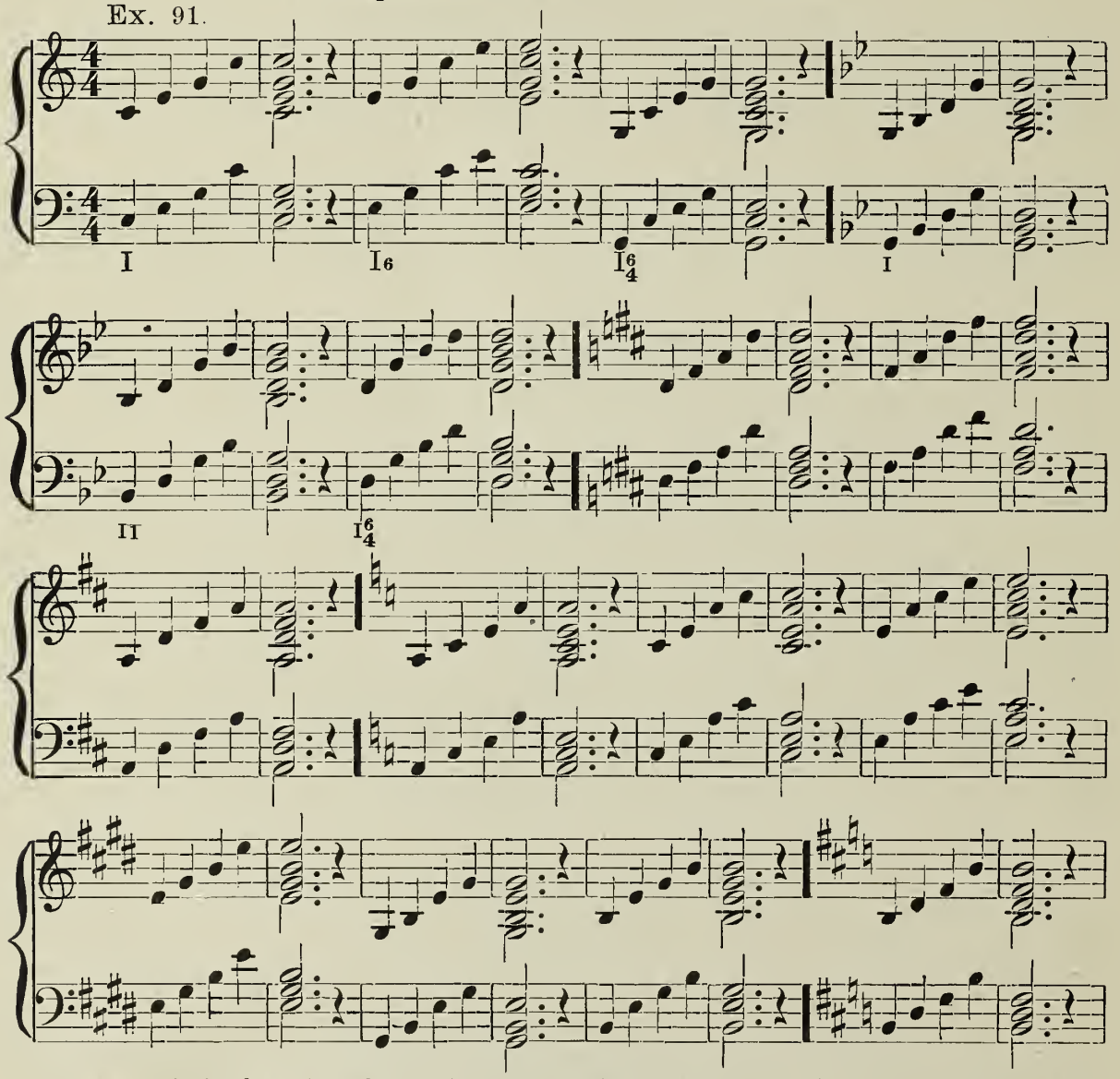
FIG. 53.



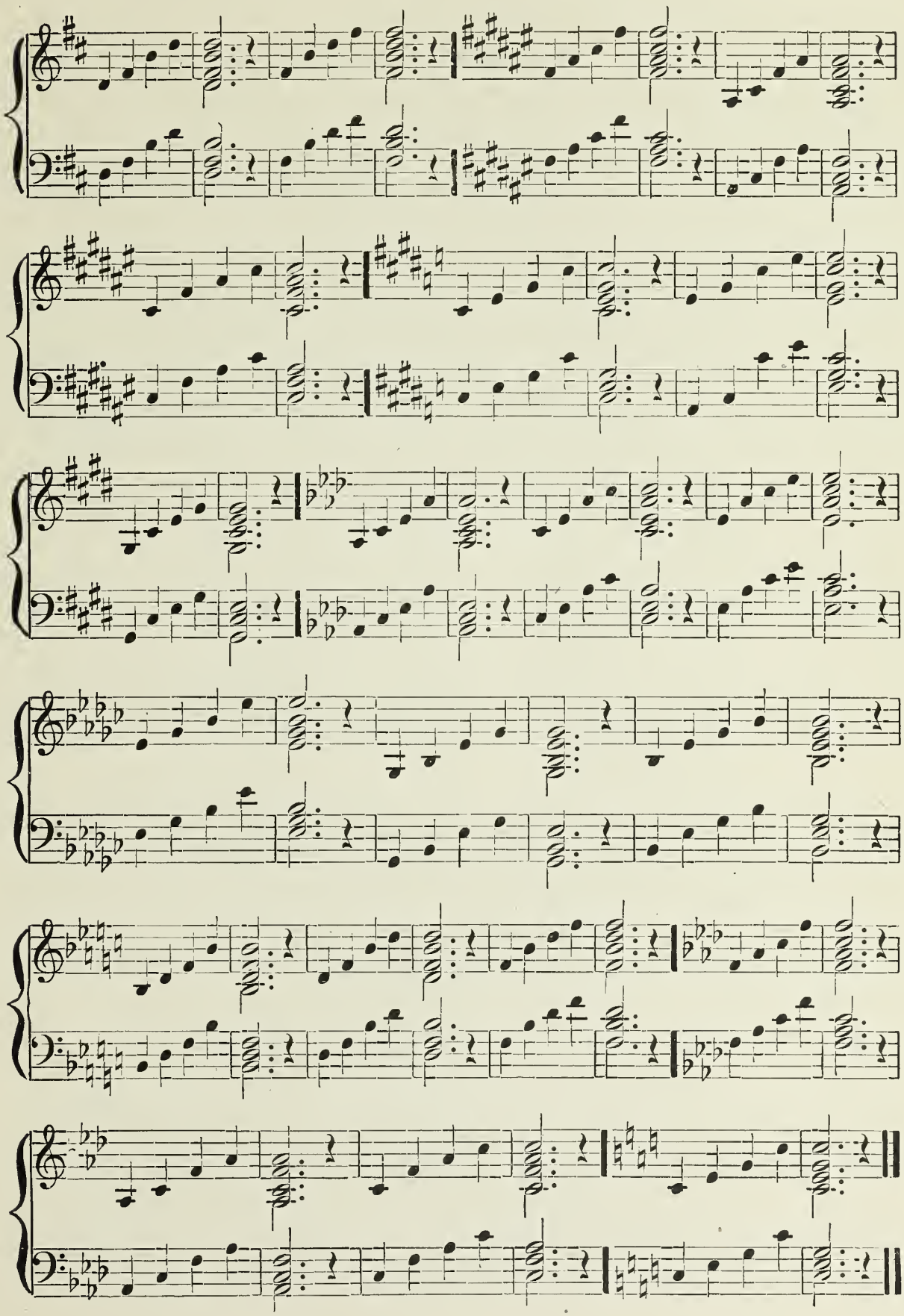
Ex. 91 exhibits these chords in alternate major and minor keys: Study it as follows: Mark every chord with the proper Roman numerals; analyze it until each interval can be named without hesitation; say numbers in rhythm, Met. ♩ = 92; Sing it at the same speed, singing the double stemmed note in every other measure; play it until it is memorized; study it with the voice and at the key-board until any chord can be played or sung at call without hesitation.

Four-part Chords and Inversions.

Ex. 91.



* NOTE. Such chords are in reality triads, as the fourth tone is merely the double of one of the original members of the chord, and not the addition of a *different tone*, as in chords of the Seventh. (See Lesson L)

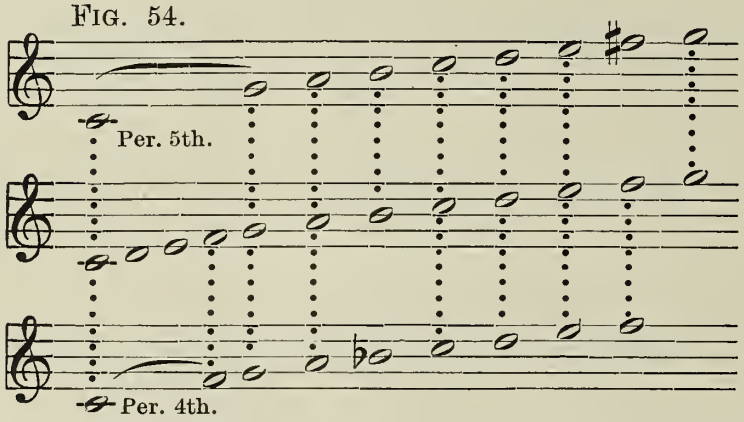


LESSON XLVI.

Modulation, Rhythm.

Modulation means change of key. Modulation is produced by introducing into melody or harmony tones which are foreign to the key indicated by the signature. Such tones are identified by accidentals, yet accidentals are not always signs of modulation, because they frequently occur as only the chromatic embellishment of a melody; the following exercises will furnish the pupil with that experience which is necessary in order to determine when a modulation has occurred, and what it is as well as enabling him to pass easily, with the voice, from one key to another. Modulation is most frequent and most easily effected between those keys which have many tones in common; such keys as those whose tonics are a perfect fifth or a perfect fourth apart. By Fig. 54 it will be seen that the key of C-major contains all the tones of the key of G-major except one, (F♯); that it contains also all the tones of the key of F-major except one, (B♭); the tonics of these keys are separated by a perfect fifth or a perfect fourth.

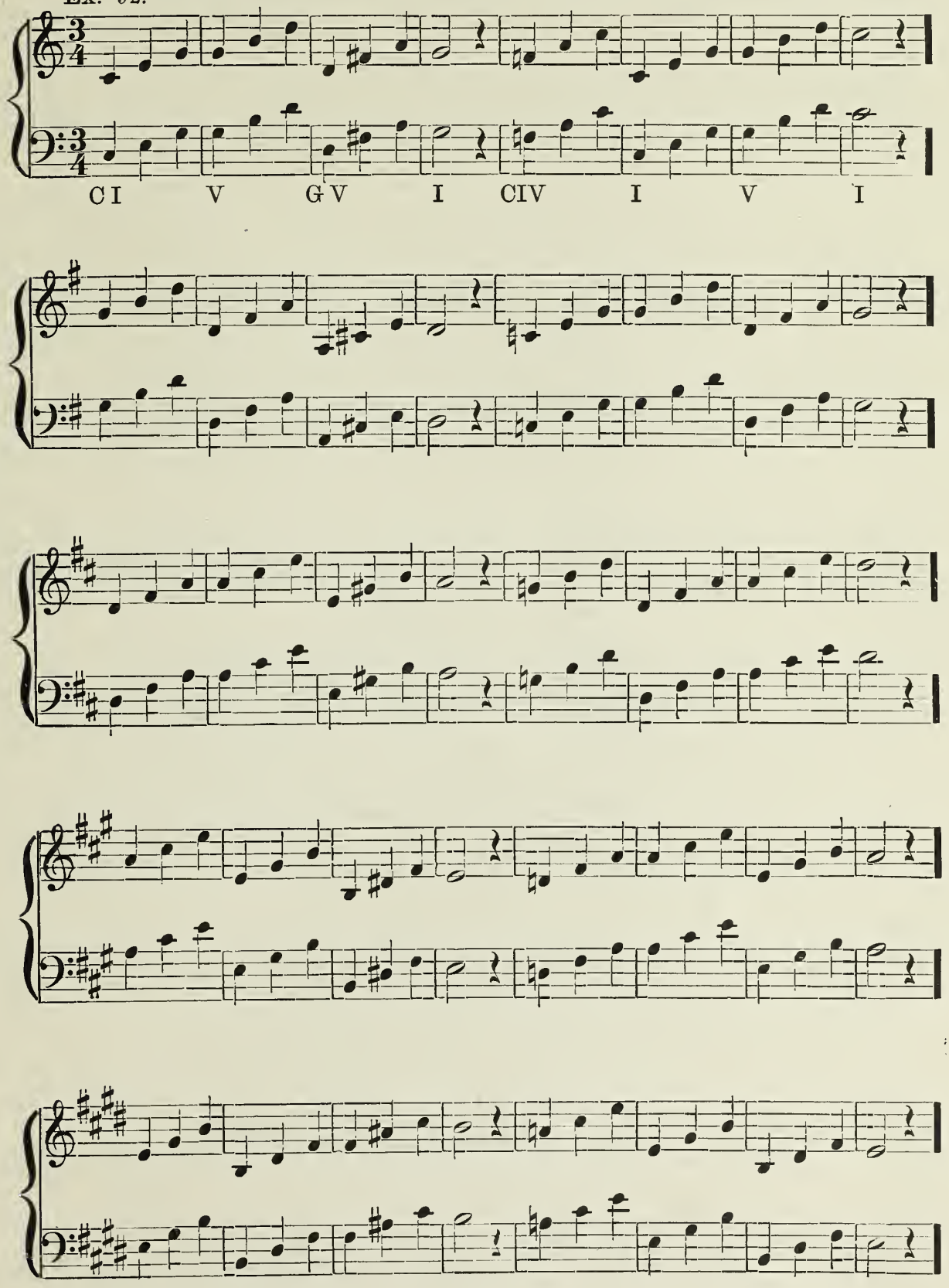
Fig. 54.

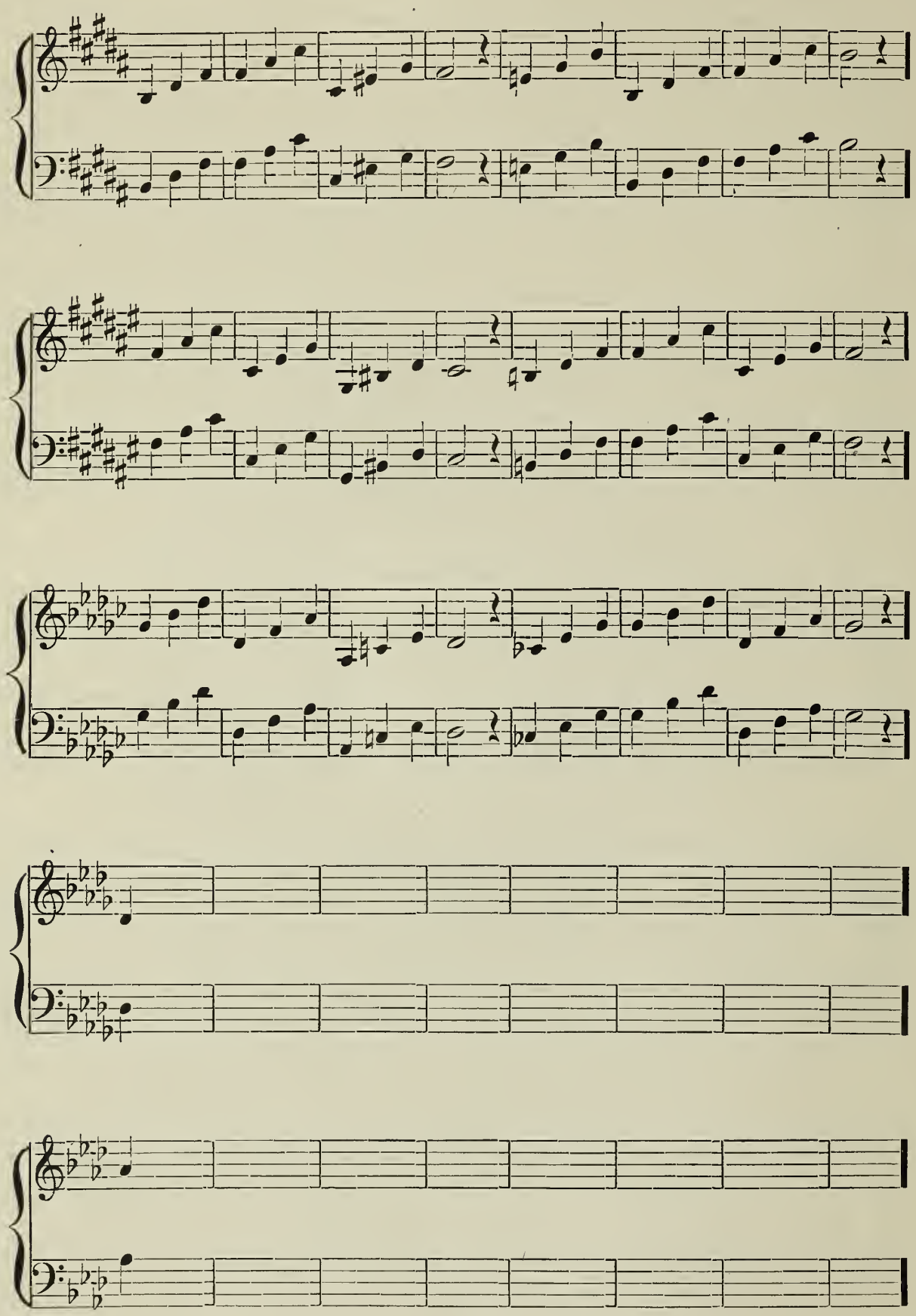


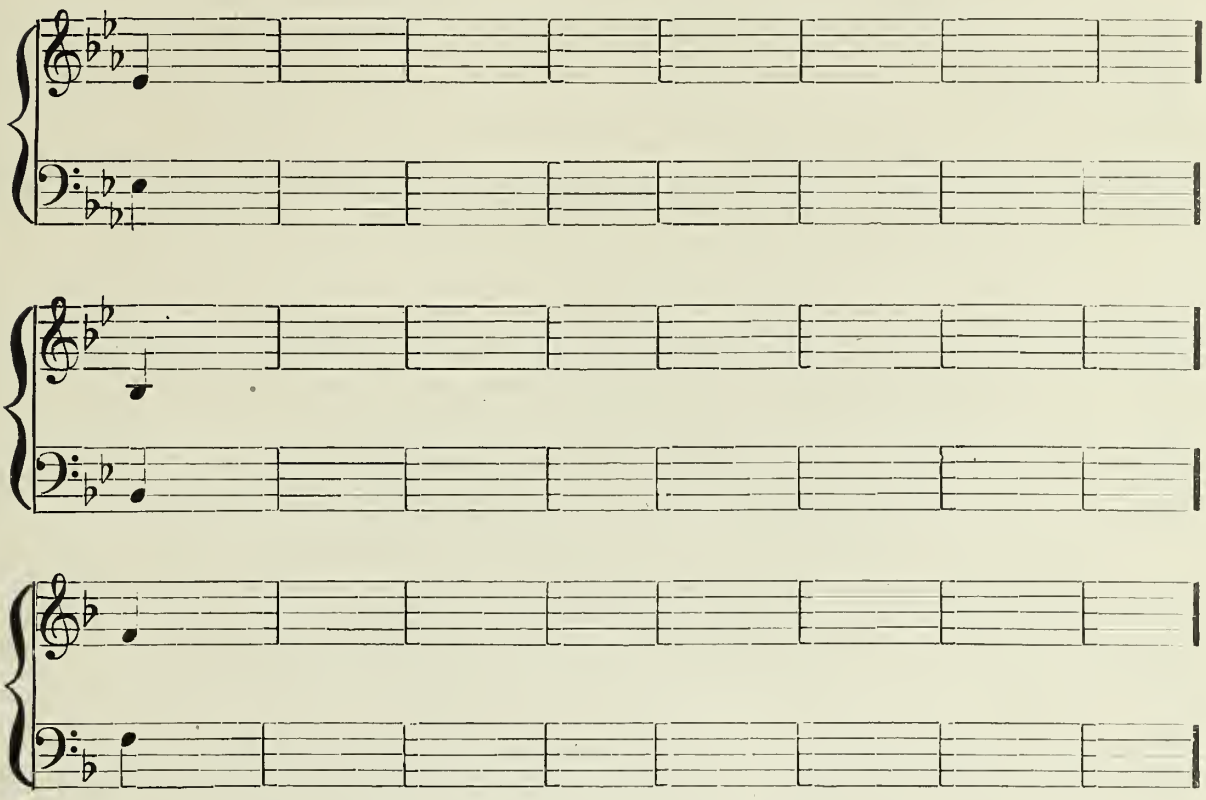
From this it appears that sharp-four (♯4) suggests the modulation to the dominant, and flat-seven (♭7) the modulation to the subdominant. In Ex. 92 these two modulations find an exemplification in every division, thus: The first two measures are in C-major, the third and fourth measures are in G-major, the dominant of C, the remaining measures are in C-major, the subdominant of G. Fill out the incomplete measures, taking care to write the notes in the same groups as in the completed measures, and mark each chord with the proper letter and numeral; study it as follows: Analyze it thus: Modulation from C-major to G-major the dominant of C; to C-major the subdominant of G. Having thus named the modulation, name the triads thus: C-major tonic and dominant triads, G-major dominant triad and tonic: C-major subdominant, tonic, dominant triads and tonic: Sing the entire Ex. with the constant endeavor to secure correct intonation; play it until any of these modulations can be given at call without hesitation. Any of the foregoing Exercises on triads which are in triple measure will furnish material for the study of the triplet by playing or singing them with one beat to the measure; practice them thus beginning at Met. ♩. = 60 and gradually increase the speed to Met. ♩. = 80.

Modulation to the Dominant and Subdominant.

Ex. 92.







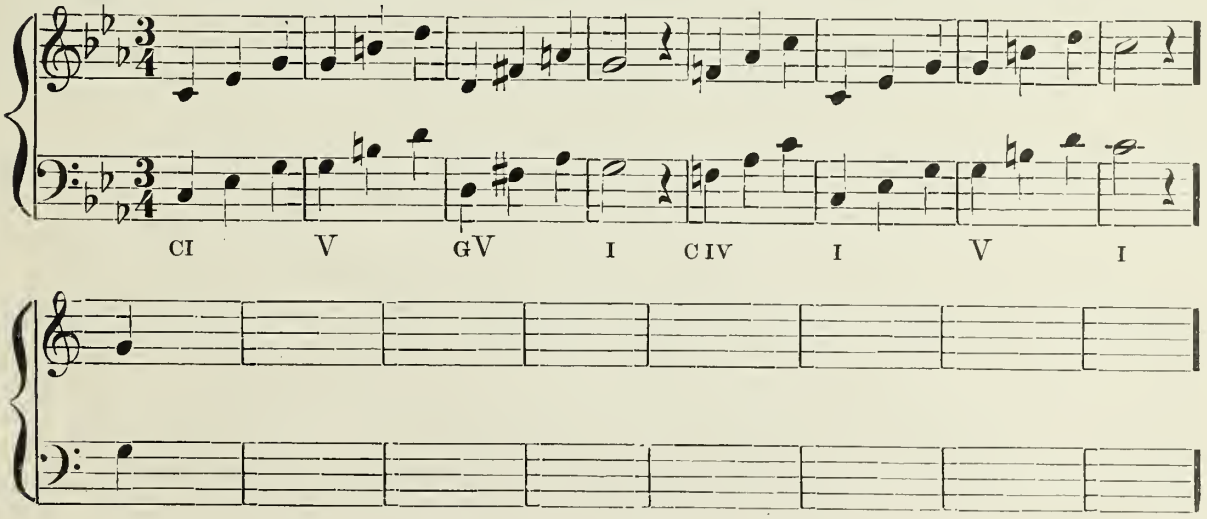
LESSON XLVII.

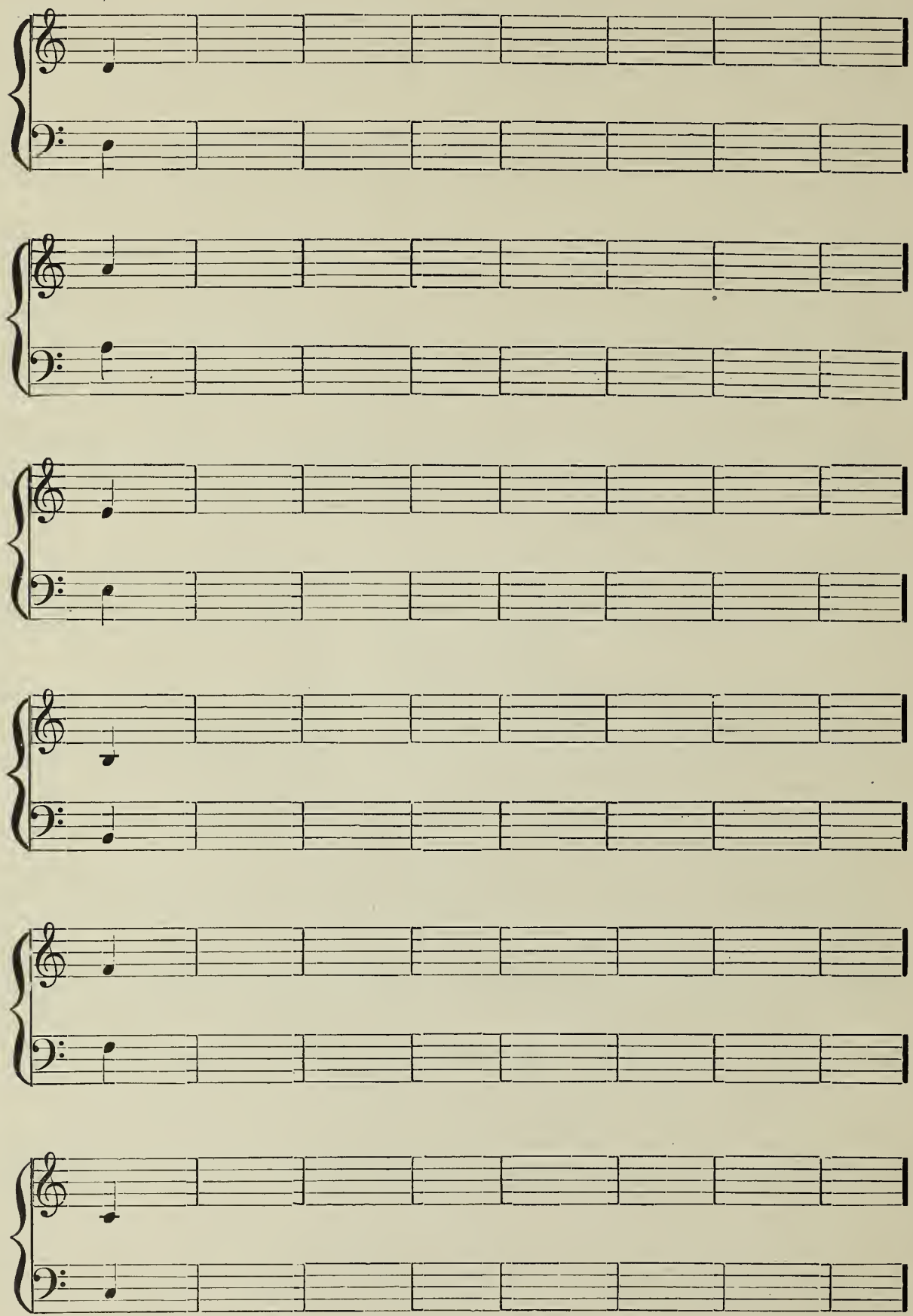
Modulation in Minor, Rhythm.

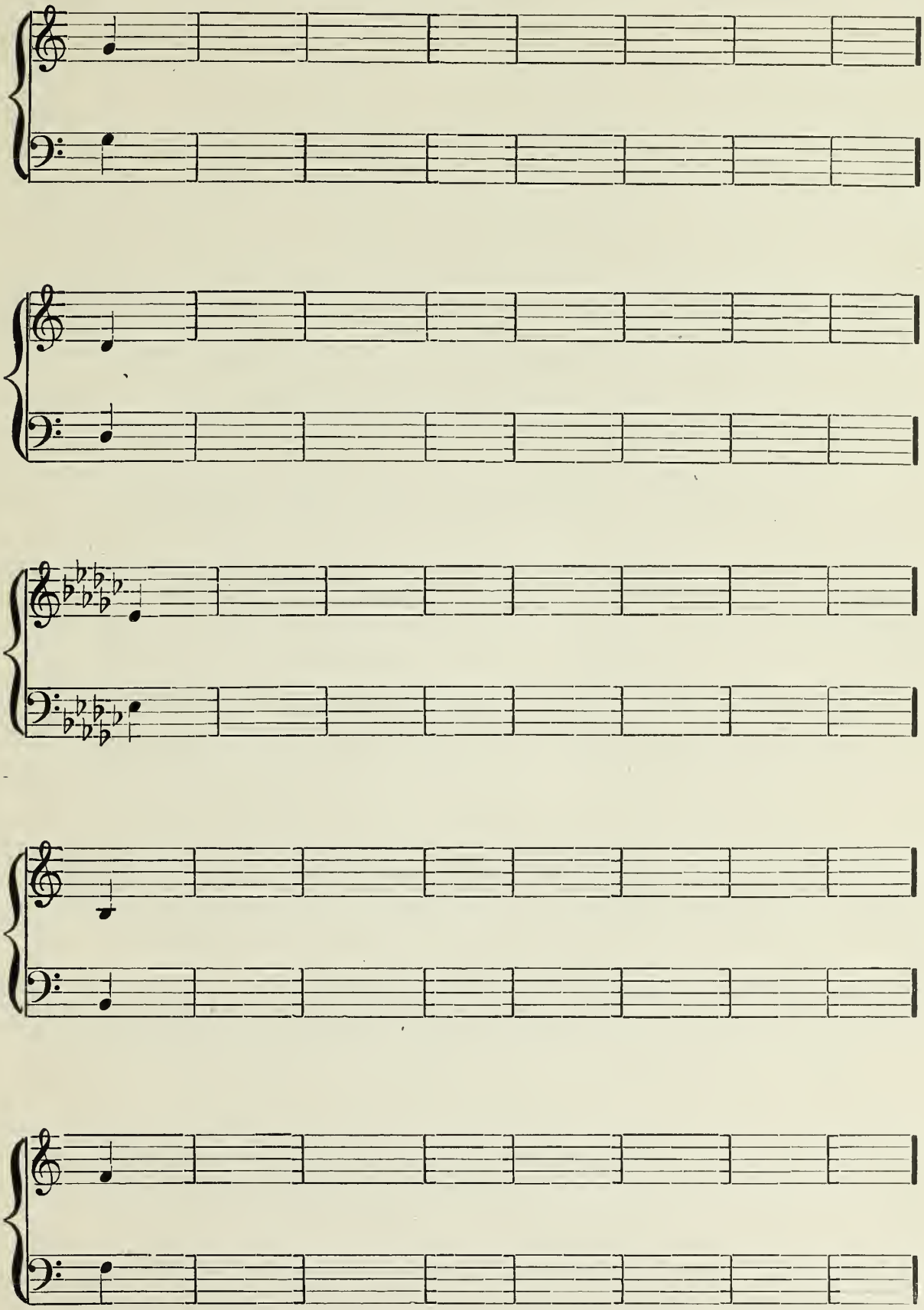
Ex. 93 illustrates the modulation from tonic to dominant and subdominant in minor. Fill out the incomplete measures; mark the chords with the proper letters and numerals, using, always, the small letters and numerals for the minor chords: Study this exercise with the utmost care, according to the directions for Ex. 92, including the suggestions for its use as a study in rhythm.

Modulation to the Dominant and Subdominant in Minor.

Ex. 93.







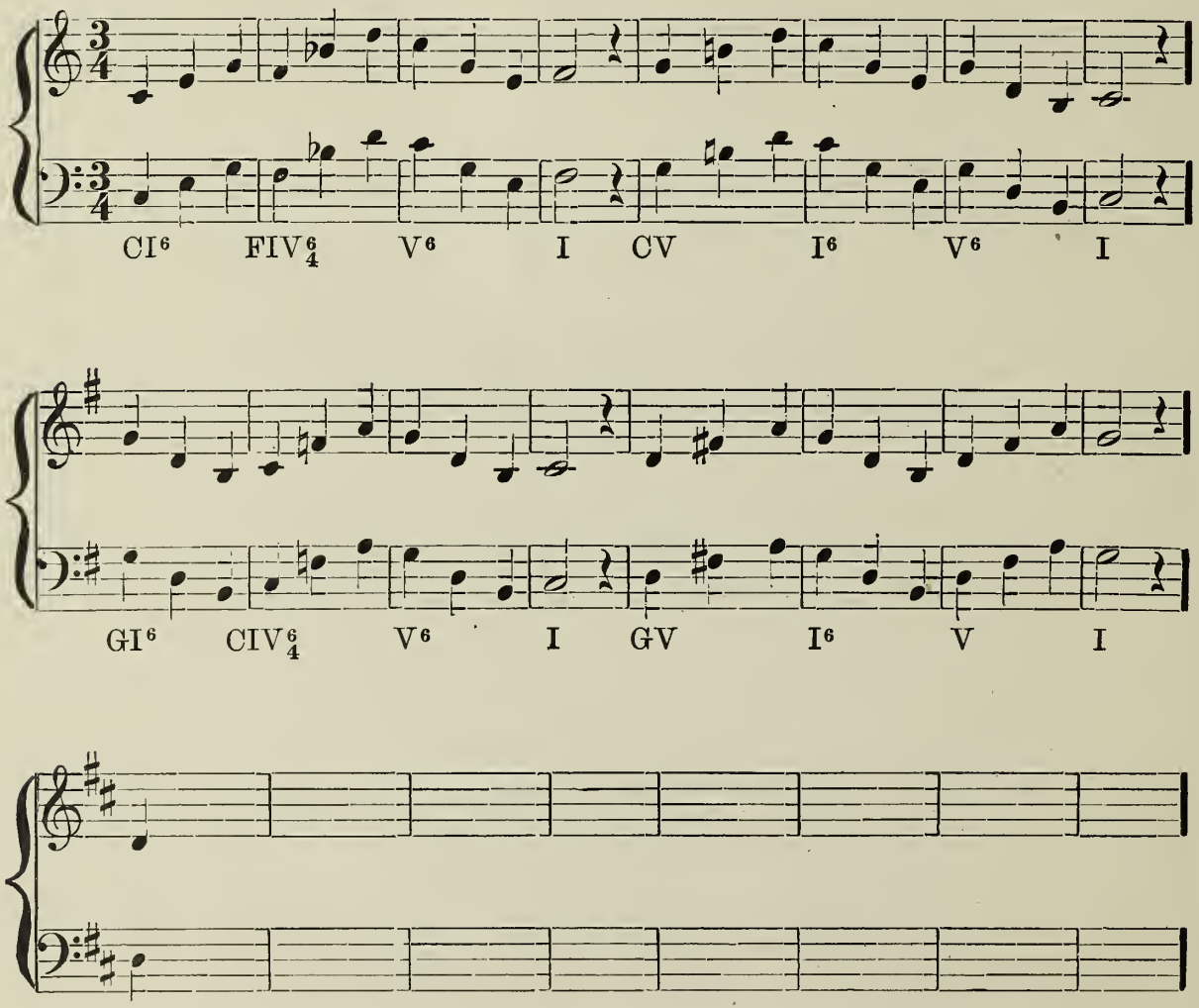
LESSON XLVIII.

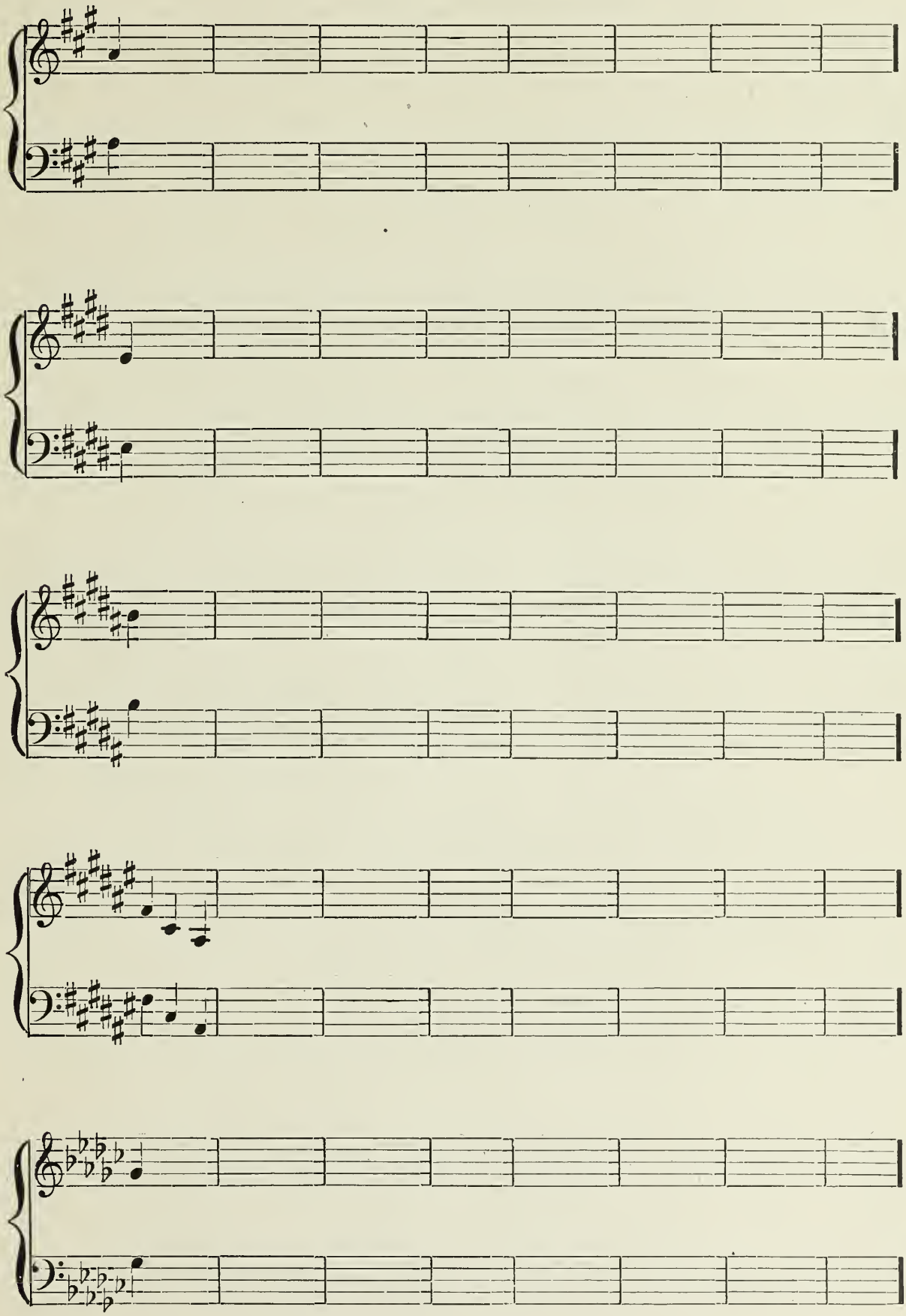
Modulation, Inversions,

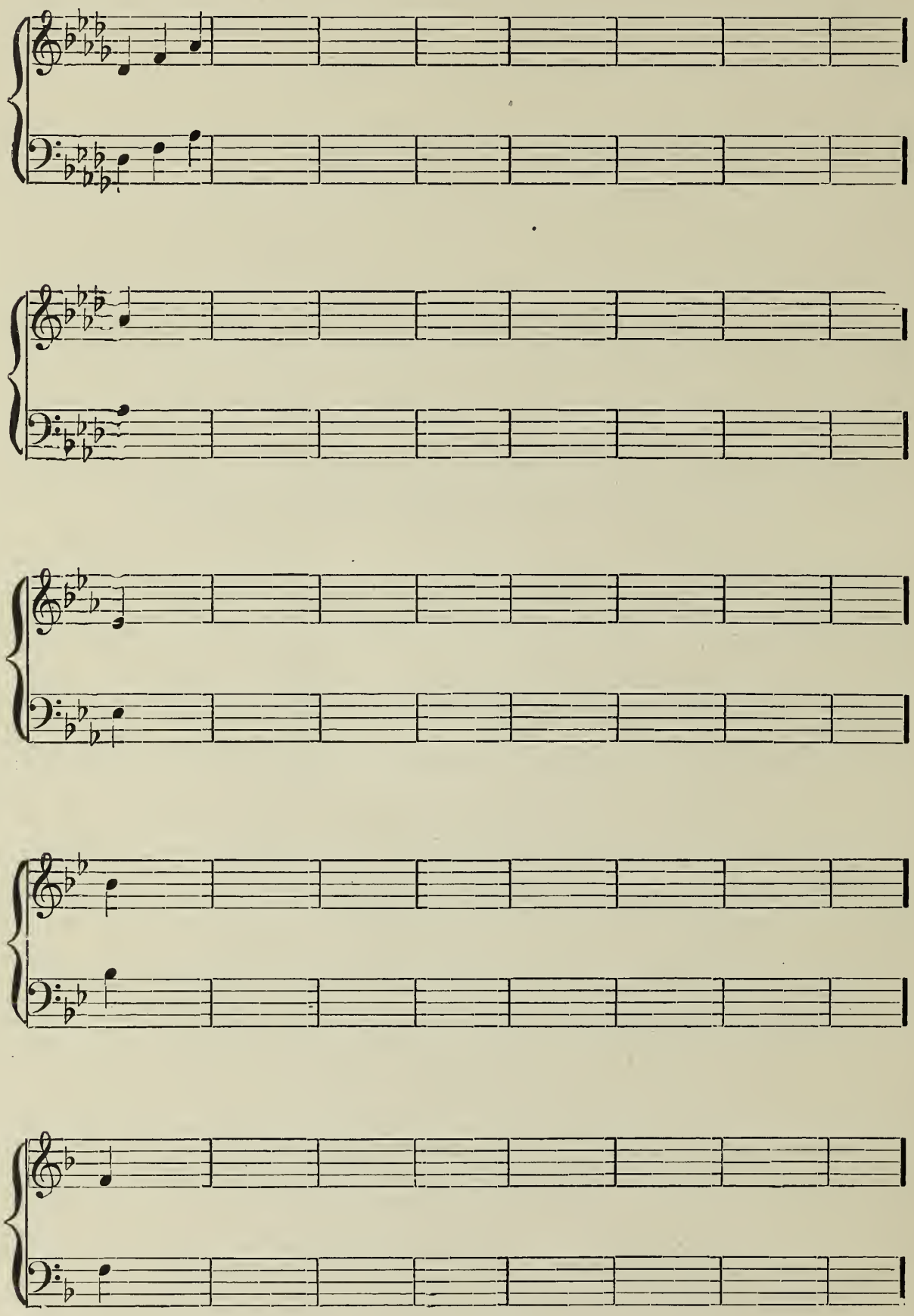
Ex. 94 illustrates Modulation from tonic to subdominant, from subdominant to dominant; flat-seven and sharp-four are the modulating tones; the two inversions of the triad are also employed. Fill out the incomplete measures, using the first inversion of the tonic in the first measure of each division whenever that tone is higher than one-line e: (See the second division.) Mark each chord with the proper letter and numeral; Name the modulations thus: Modulation from C-major to F-major the subdominant of C, to C-major the dominant of F: Notice that the last modulation is also a return to the original key. Name the chords thus: C-major tonic, F-major subdominant six-four, dominant six, tonic; C-major dominant, tonic six, dominant six, tonic. Study the exercise according to the directions for Ex. 92. Use it also as a study in rhythm.

Modulation to the Subdominant and Dominant.

Ex. 94.





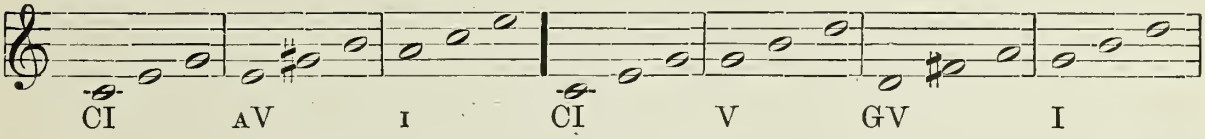


LESSON XLIX.

Subordinate Triads.

The subordinate triads are those upon the second, third, sixth and seventh degrees of the scale. They are called subordinate because they do not so distinctly fix the character of the scale as do the principal triads, therefore their use is much more limited. Any of these triads may be used incidentally in the following studies. The triad on the submediant (VI) of the major scale is the tonic triad of the relative minor; as such it will receive consideration at this point. As was stated in Lesson XLVI the most frequent modulations are those between the tonic, dominant and subdominant: the next in order is that between the tonic and submediant or relative minor: (VI) This modulation is produced by raising the fifth (♯5) this being the leading tone of the relative minor. The mediant (III) triad changed thus, becomes the dominant triad of the relative minor, in the same manner as the raised fourth (♯4) in the modulation to the dominant, changed the supertonic (II) triad to the dominant triad of the next key in the order of fifths.

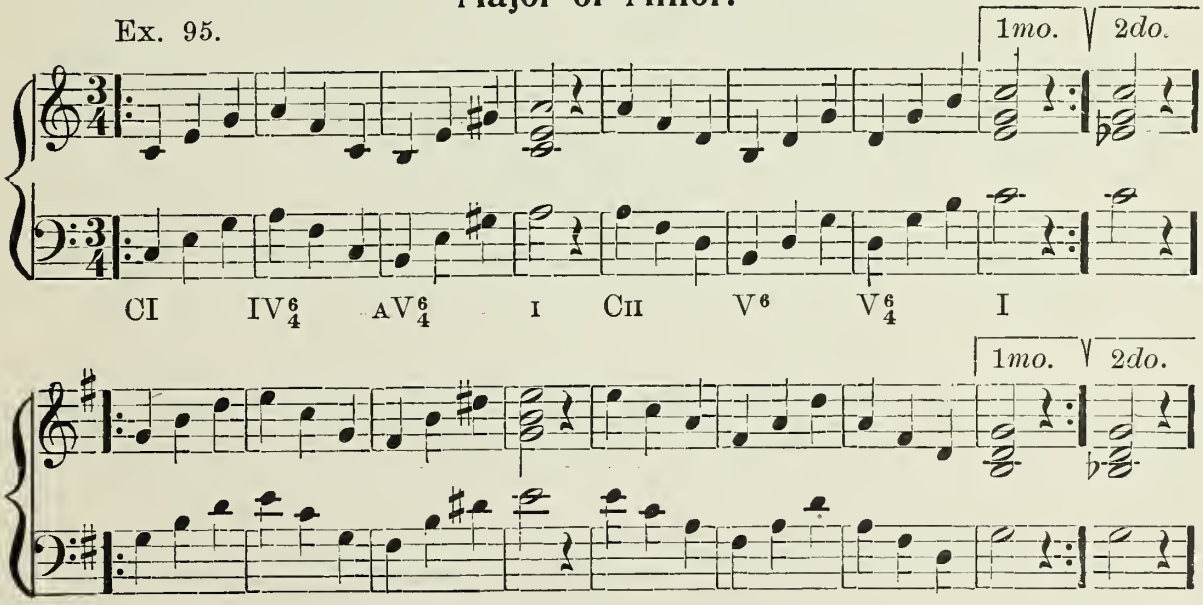
FIG. 55.

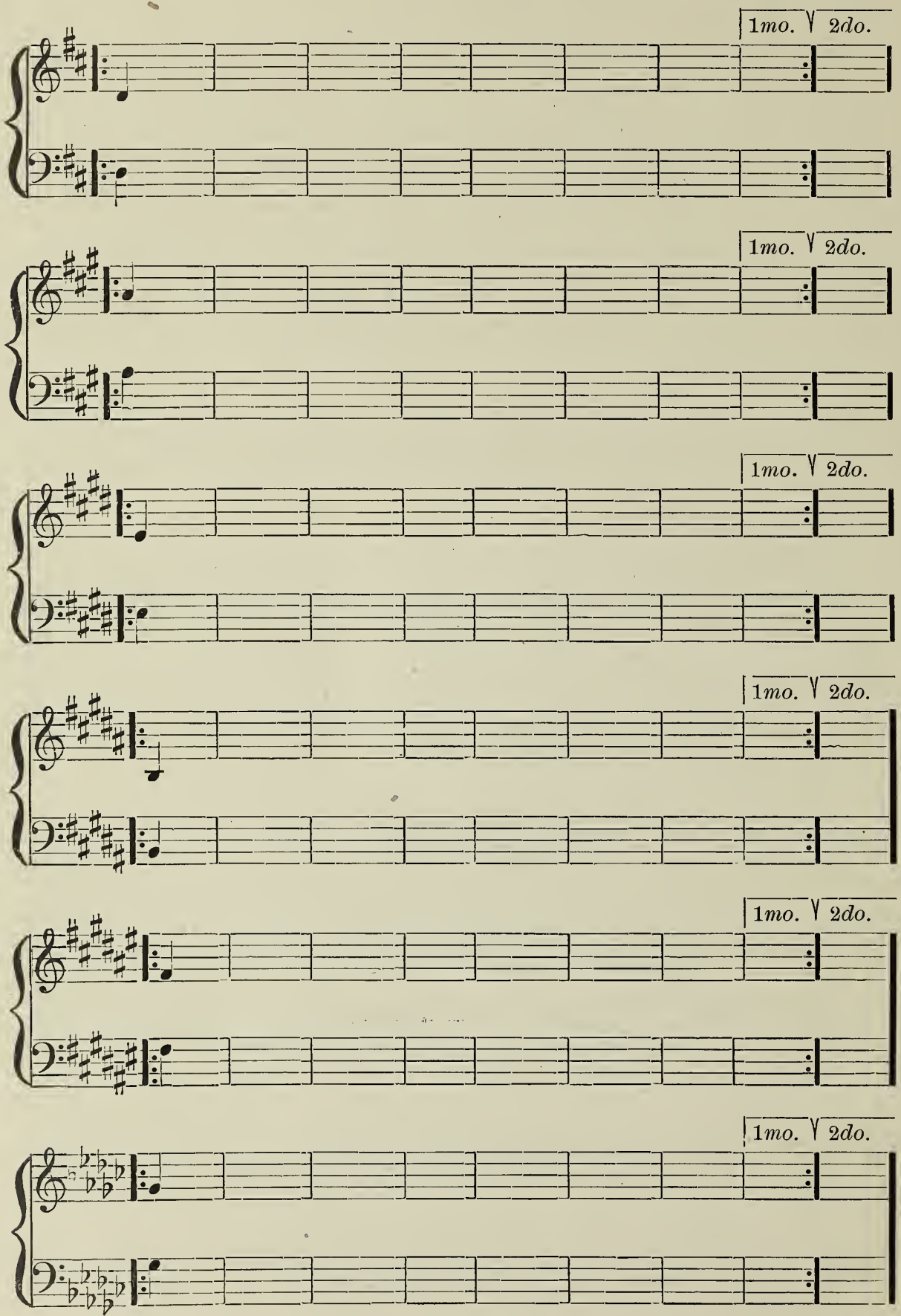


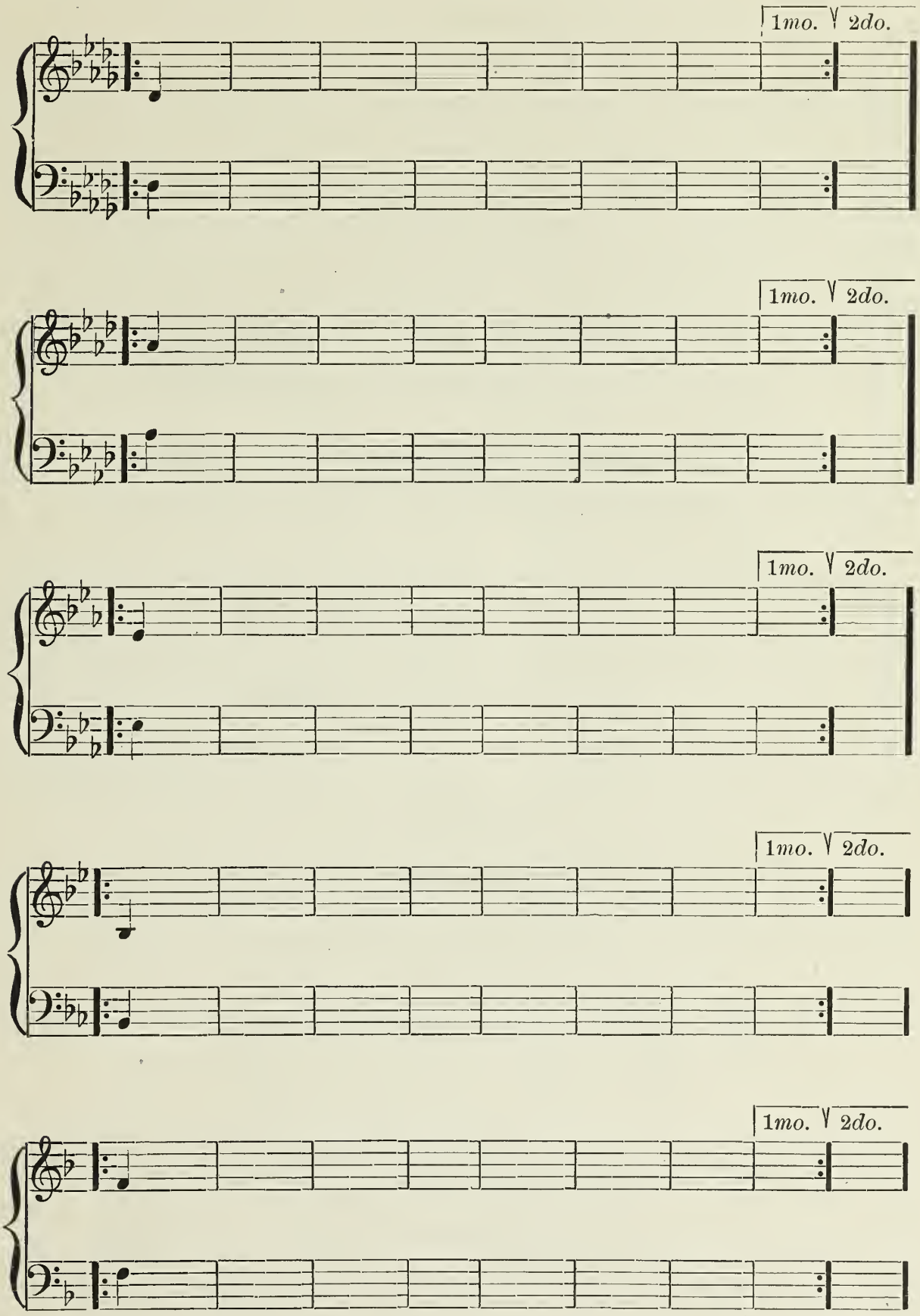
(See also Ex. 92.) Ex. 95 illustrates the modulation to the submediant, it also introduces the supertonic triad (II) and proves, in the second ending, that the dominant triad leads as directly to the tonic (parallel) minor as to the major; this cannot fairly be called a modulation, as modulation implies a change of tonic, but it brings a composition into close proximity to distant keys, that is, to keys whose signature differs much from the signature of the next key in order of fifths. (See Lesson LVII.) Study Ex. 95 according to the directions for the foregoing exercises in modulation, including those which have reference to rhythm: Note especially that the *raised fifth* (♯5) suggests a modulation to the relative minor.

Modulation to the Submediant and Return to the Tonic Major or Minor.

Ex. 95.




1mo.
2do.
1mo.
2do.
1mo.
2do.
1mo.
2do.
1mo.
2do.
1mo.
2do.

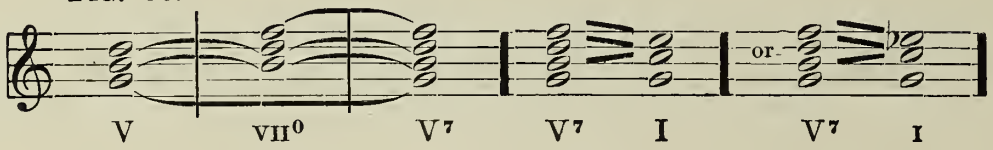

1mo.
2do.
1mo.
2do.
1mo.
2do.
1mo.
2do.
1mo.
2do.

LESSON L.

The Dominant Seventh, Rhythm.

The dominant triad has already been fully treated; the dominant seventh chord is formed by adding another third to the dominant triad, making, thus, a four-tone chord the upper note of which (4) is a seventh from the root(5); these tones being dissonant, demand a resolution (a progression into an inactive chord). In order to easily understand this form of harmony, several facts already familiarized should be recalled: The tones of the scale included in this chord are 5, 7, 2, 4, of these 7, 2, 4, are active, and 5 inactive; (See Lesson II, Fig. 8). 7, 4, is the diminished fifth; 7 must ascend to 1, and 4 descend to 3. (See Lesson XIII, Fig. 28). 7, 2, 4 is the diminished triad, (See Lesson XXIX, Fig. 44), whose tones move thus; 7 to 1, 4 to 3 and 2 to 1; these inactive tones with the root (5) form the tonic chord, so that the natural resolution of the dominant seventh chord is to the tonic in major or minor.

Fig. 56.



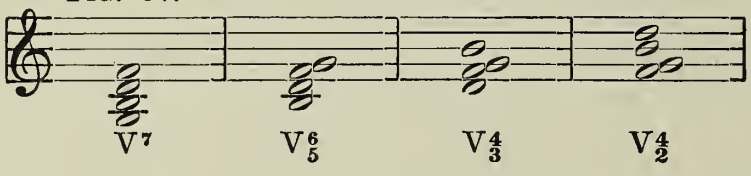
Ex. 125 Sol. Bk. 1 shows this chord in several keys with the resolving tone some-times in major and sometimes in minor: Analyze it thus: Dominant-seventh chord of D-major, dominant-seventh chord of E-major, dominant-seventh chord of f♯ minor etc. Sing and play it first as it is written, Met. ♩ = 84: then Alla Breve Met. 𝅗𝅥 = 66 to 𝅗𝅥 = 84: When playing it fill out the triad with both hands in the alternate measures. Study Ex's 198 and 199, Sol. Bk. 2, as follows; Say the numbers, sing and play them, beginning at Met. ♩ = 88 and increasing the speed to Met. ♩ = 120.

LESSON LI.

The Dominant Seventh Chord and Inversions.

The dominant seventh chord is subject to the same inversions as the triad, and as it is a four-tone chord, it has a third inversion with the seventh in the bass.

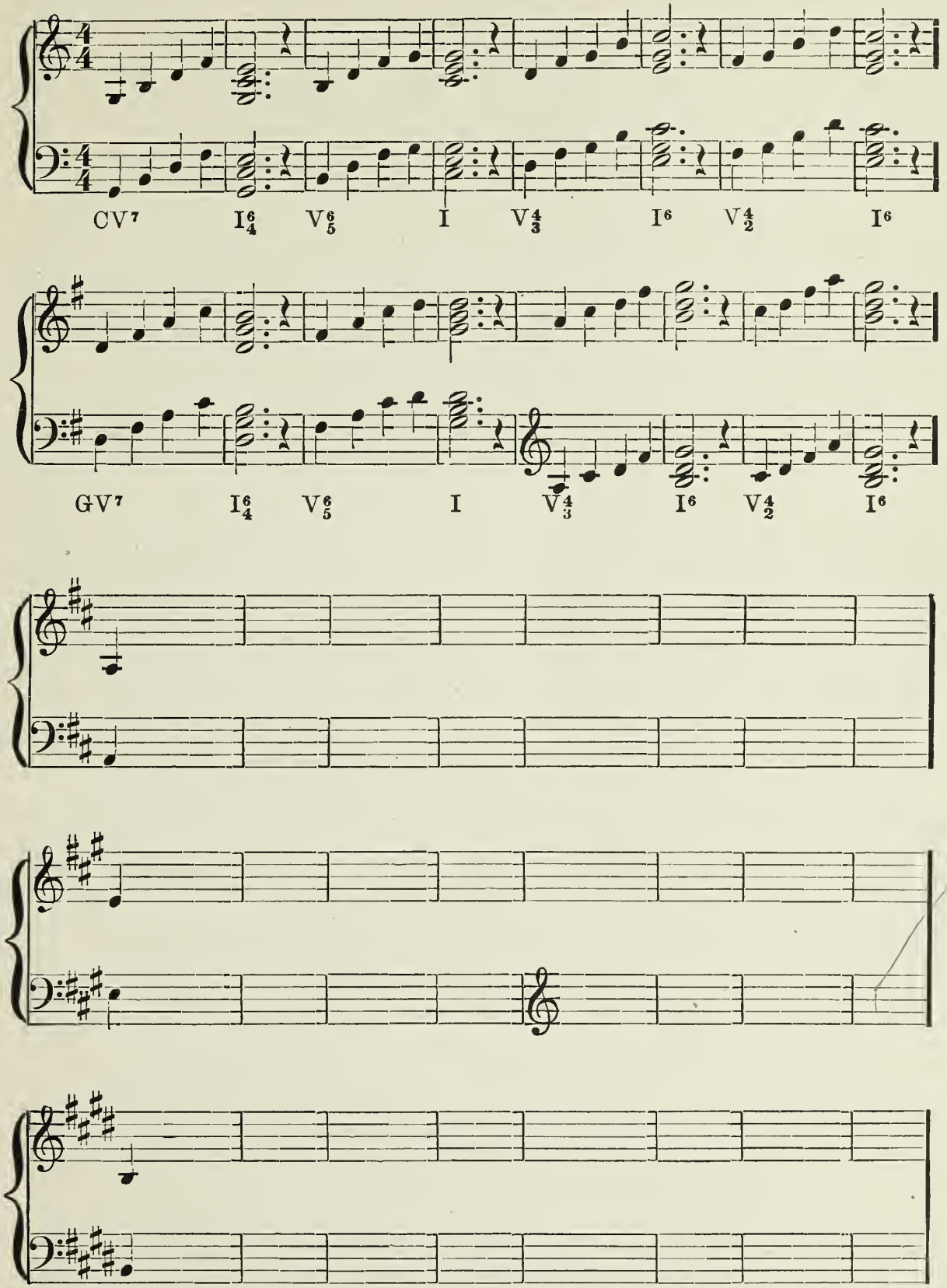
Fig. 57.

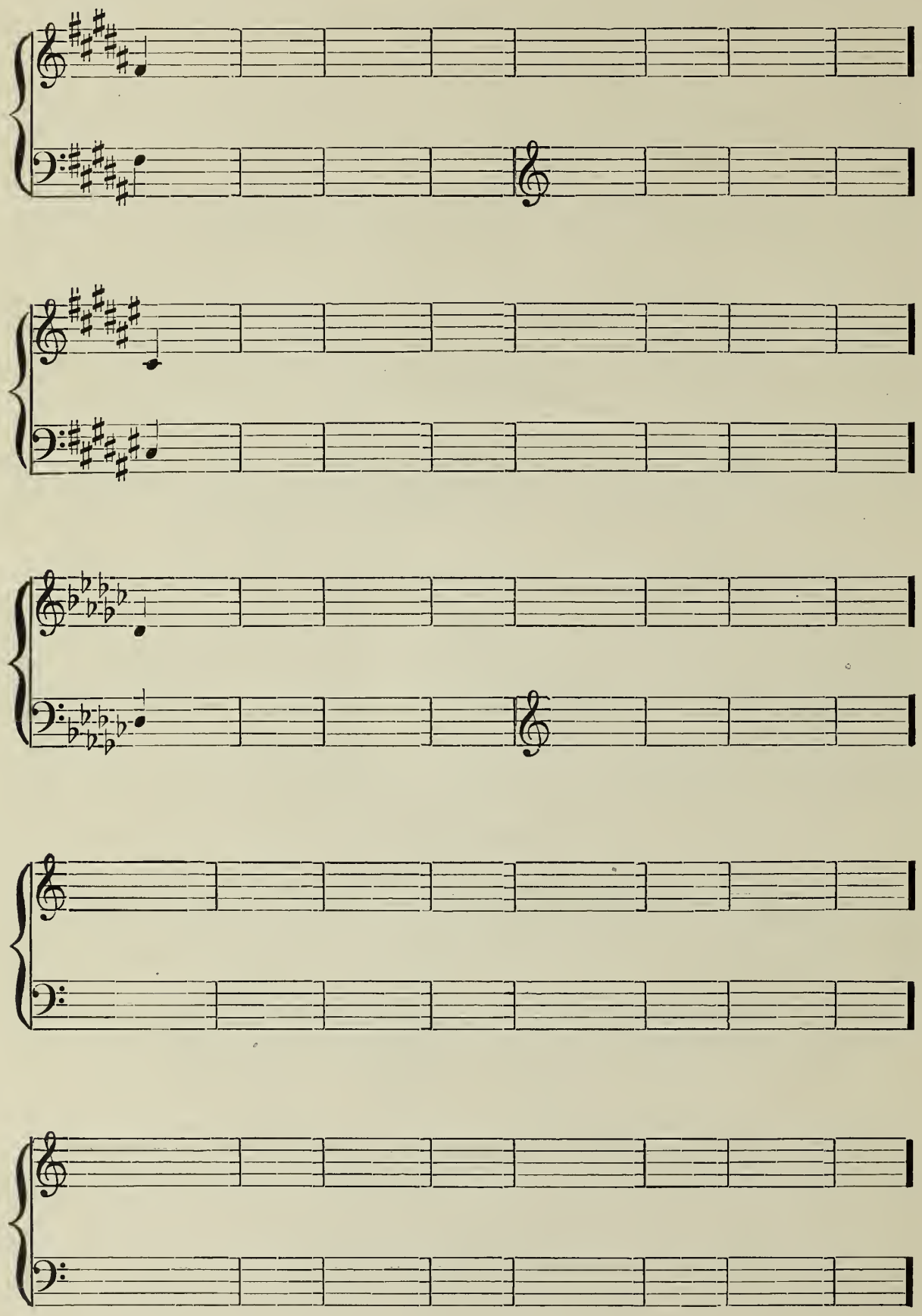


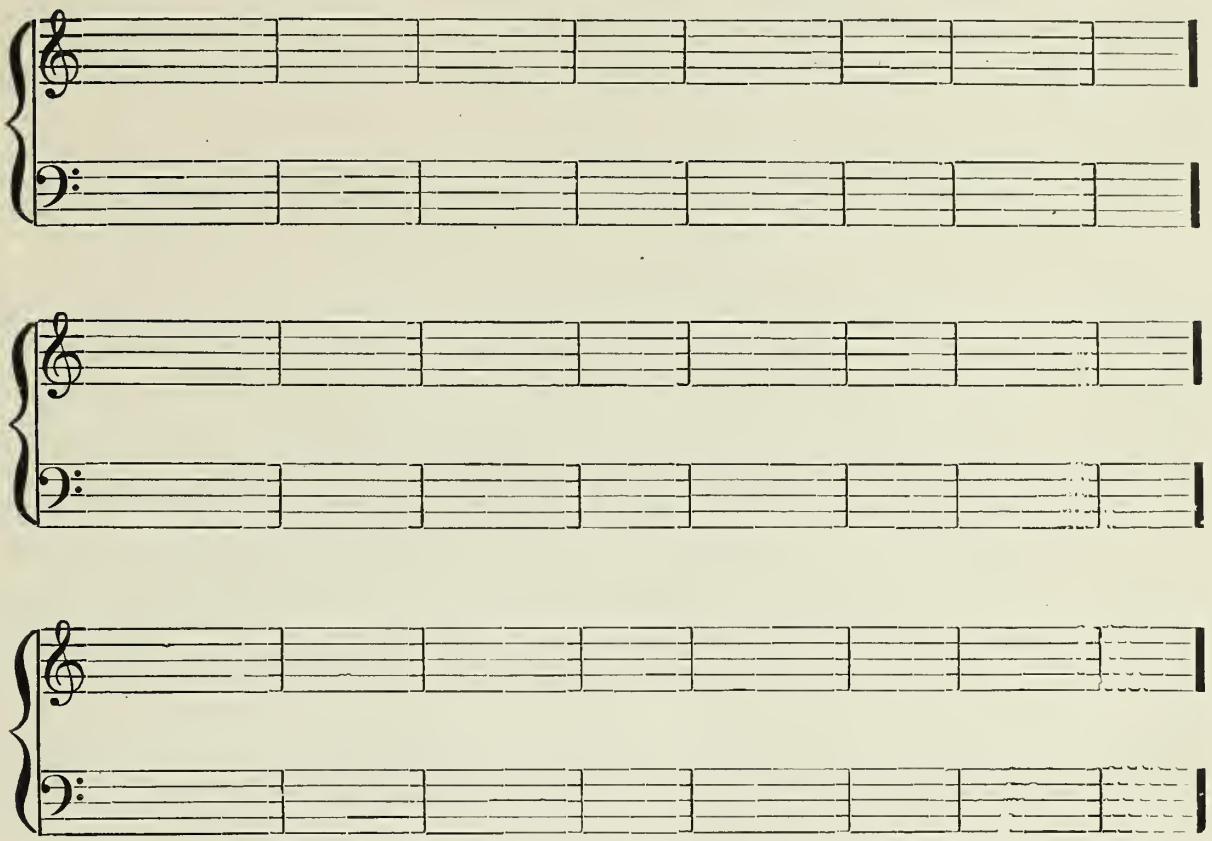
Fill out the incomplete measures of Ex. 96, which will there exemplify the chord of the dominant seventh, with its inversions, in every major key: Mark each chord with the proper numerals, analyze it first by chords thus, dominant seventh, tonic six-four, etc. etc. Analyze each dominant seventh chord until the interval can be given with great rapidity: Sing as much of it as comes within the compass of the voice, play it until this chord, in any of its forms, in any major key can be given without hesitation.

The Dominant Seventh Chord and Inversion.

Ex. 96





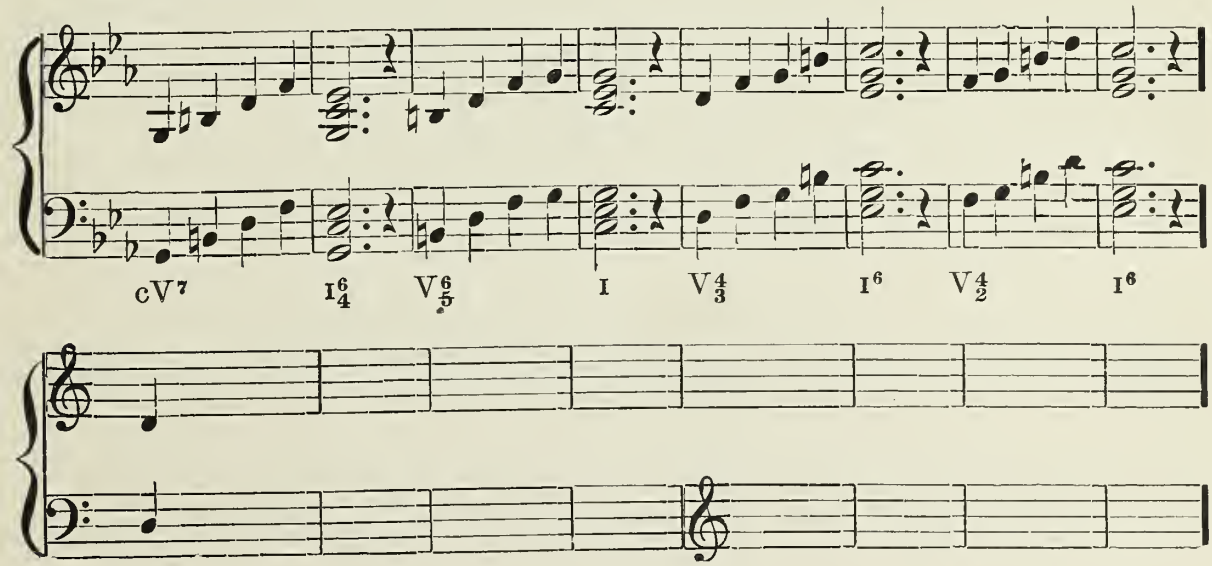


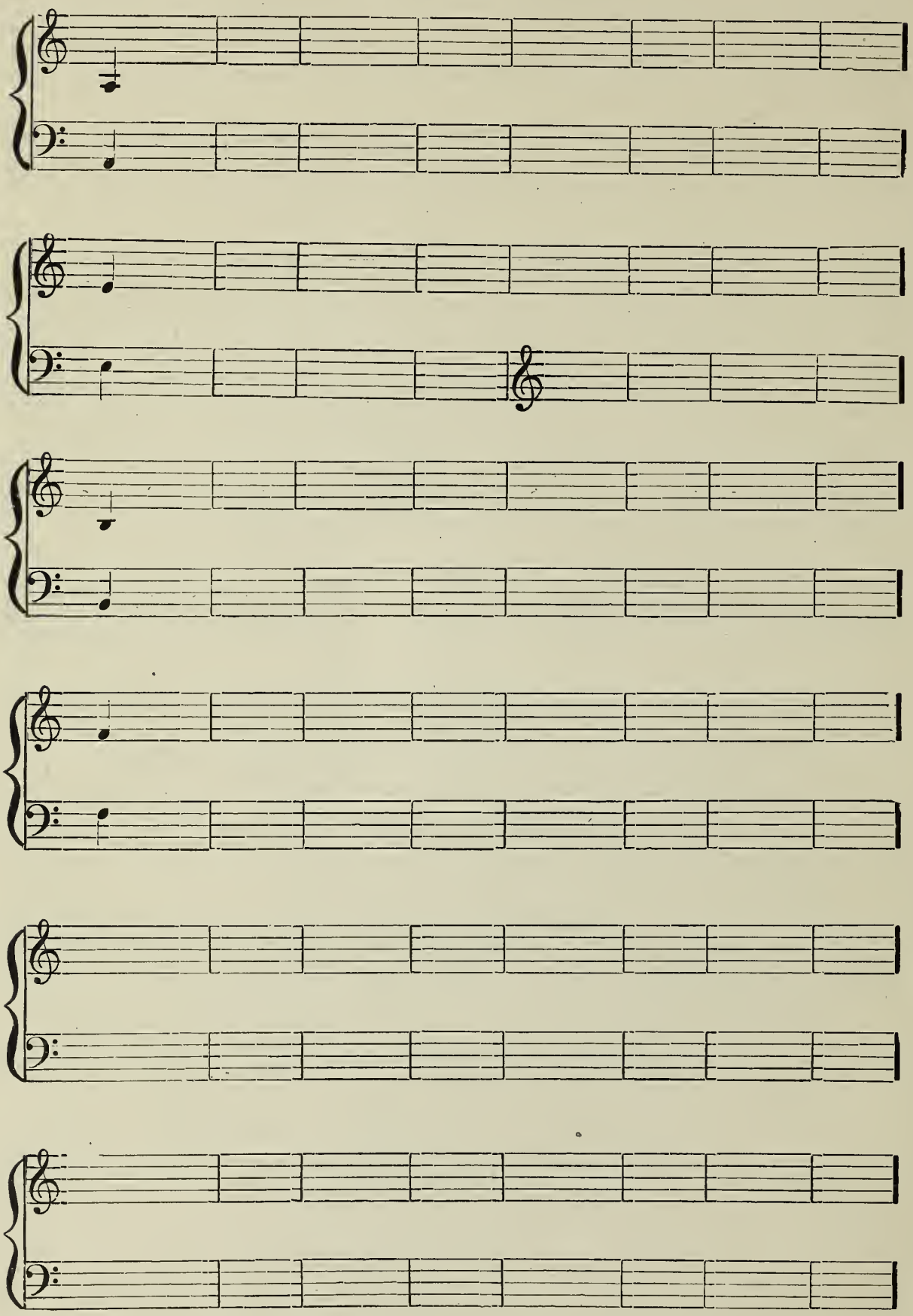
LESSON LII.

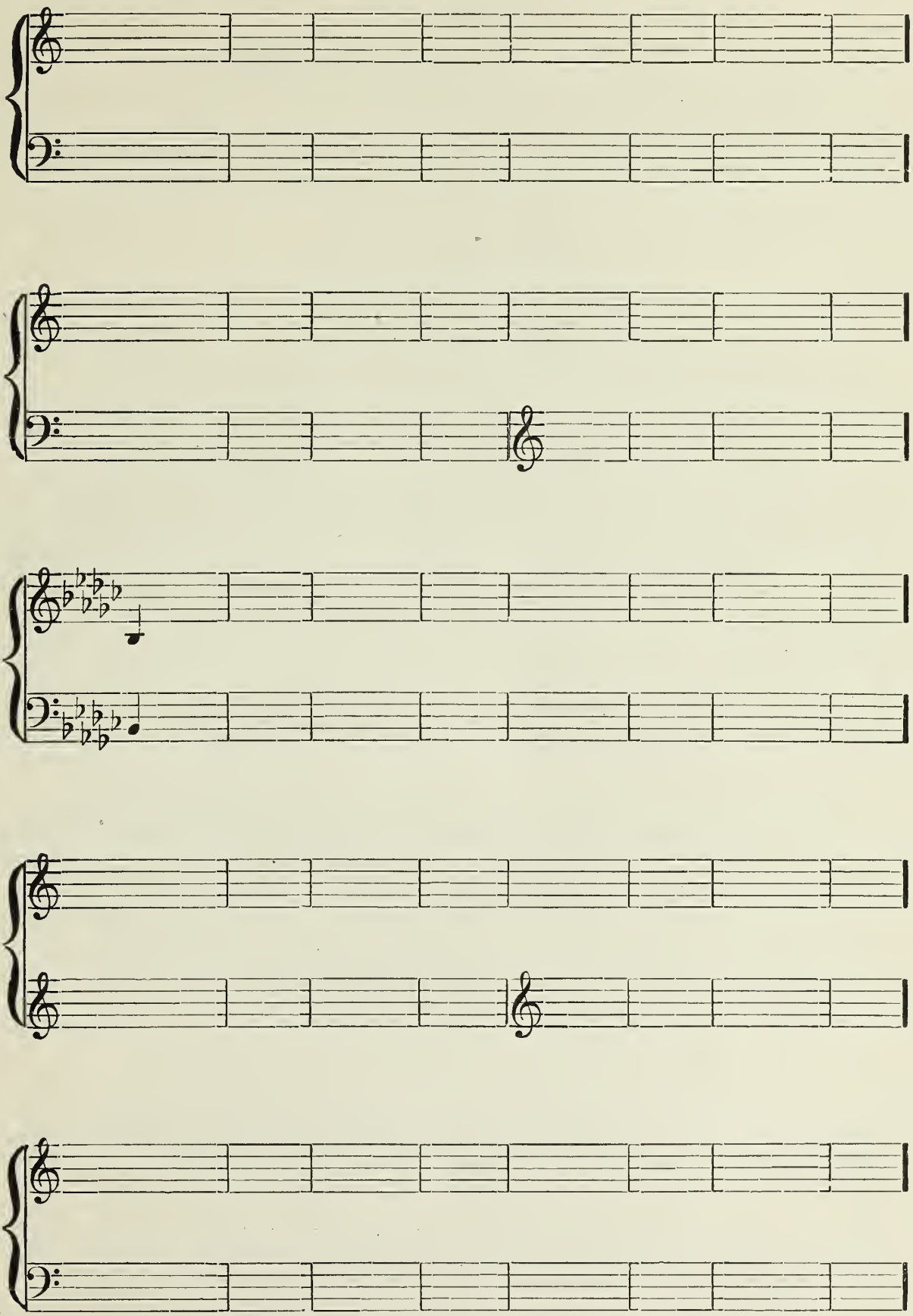
The Dominant Seventh Chord and Inversions in Minor.

Ex. 97 displays the use of the same chord in minor: Fill out the incomplete measures; mark each chord with the proper letter and numerals; study it according to the directions for Ex. 96.

Ex. 97.





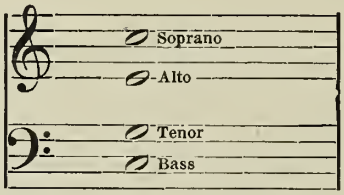


LESSON LIII.

Four=part Harmony. Positions.

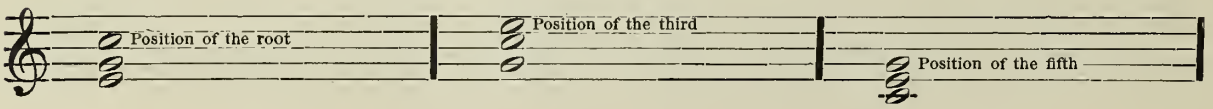
In four-part harmony the parts are usually named from the voices which, in a mixed quartet, would sing them; this is the case even when, in pure four-part writing, the composition is intended for instruments instead of voices. The lowest voice is called the Bass, the next higher the Tenor, the next the Alto, the highest voice the Soprano.

FIG. 58.



The foregoing studies contain the same notes for both hands; in them the different inversions of a chord have been explained and practised: It must now be recalled that the term "inversion" always refers to the bass (See Lesson XLIII). In the following exercises a separate part for the left hand is written, which must be considered in the analysis of each chord. The term "position" when applied to a chord refers always to the soprano, and a chord may have as many positions as there are parts. When the root is in the soprano the chord is said to be in the position of the root, when the third is in the soprano it is in the position of the third, or the fifth is in the soprano it is in the position of the fifth, etc. The word "position," then, has reference *to the soprano*, the word "inversion" *to the bass.*

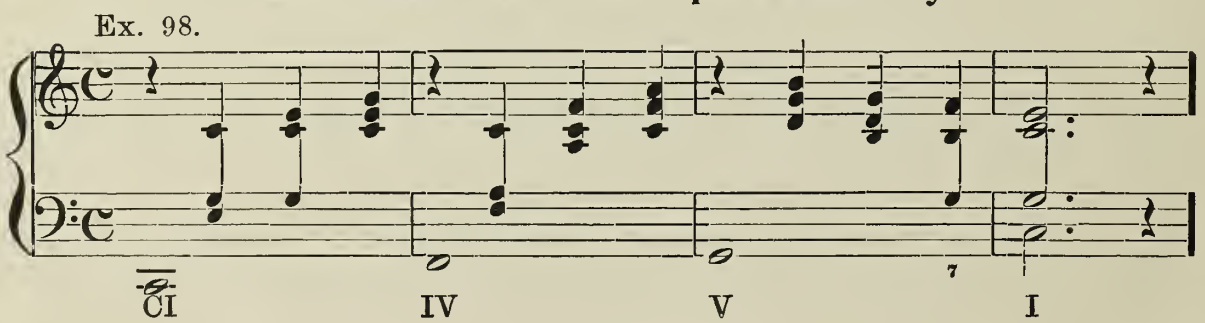
FIG. 59.



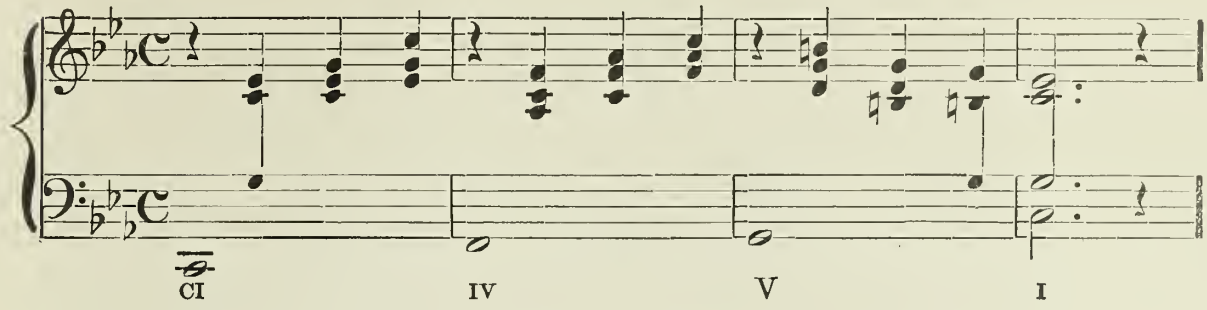
In Ex's 98 & 99 the chords of the tonic, subdominant and dominant appear in these positions; in the last chord but one, the dominant seventh is introduced with the *seventh* in the soprano; in this case the chord is in the position of the seventh. In some cases the lower tones of a chord are written on the bass clef in order to furnish practice in this quite common form of notation. Play these exercises in all keys; the lesson is but partially learned so long as there is any hesitancy over any of these chords in any key: the exercises may also be sung thus; strike the bass tone and sing the soprano, alto and tenor in strict time.

Chord Positions in Four=part Harmony.

Ex. 98.



Ex. 99.

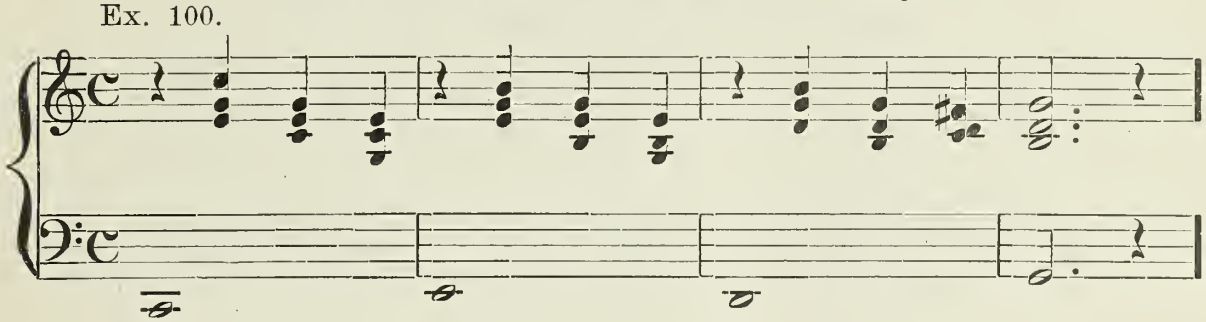


LESSON LIV.

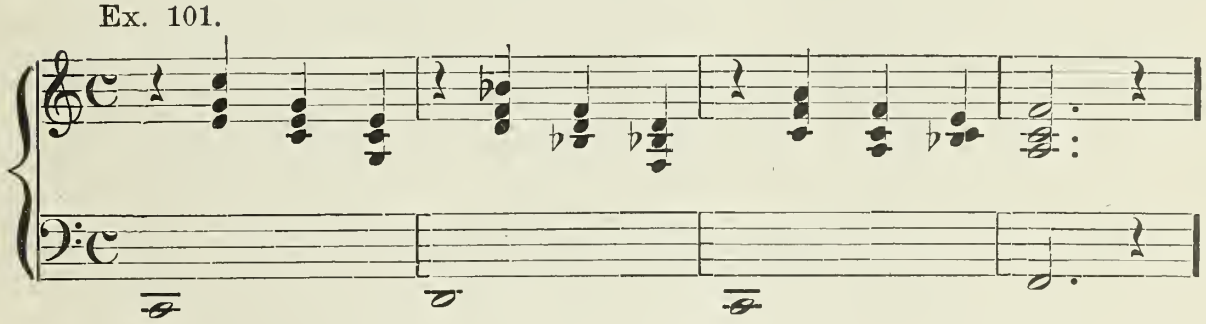
Ex's. 100, 101, & 102 contain modulations: what they are and what chords are used must be decided by the pupil: Study them according to the directions for Ex's. 98 & 99.

Modulations in Four-part Harmony.

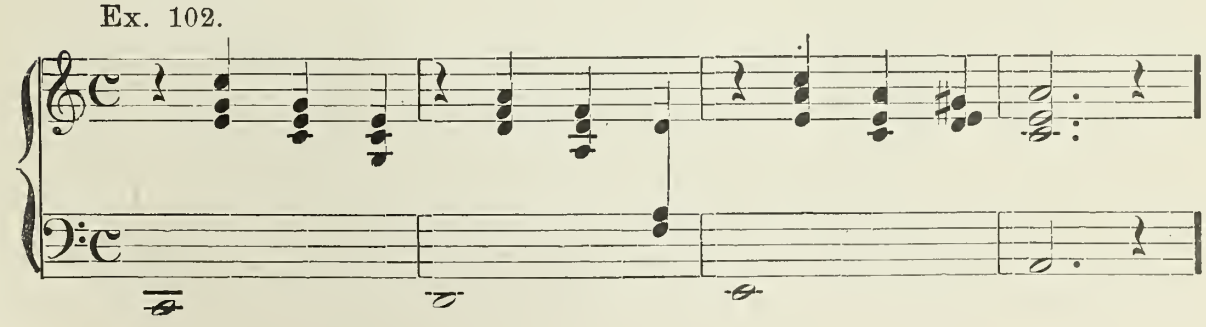
Ex. 100.



Ex. 101.



Ex. 102.



LESSON LV.

Next-Related Keys.

The next related keys are those which have the most tones in common. (See again Lesson XLVI). This will be most easily discovered by a comparison of signatures; those which have but one change in the signature possess the largest number of common tones, and are therefore the next related keys. Such a comparison discloses six keys which have but a single change in their signatures. The following diagram shows these six major and minor keys to be those whose tonics are a fifth apart. The middle column contains the keys which are the center of each series: those to the right are a fifth above, those to the left a fifth below; the large letters indicate the major, the small letters the minor.

Diagram of Next-related Keys.

1st series.	F 1 Flat. d 1 Flat.	C no Signature. a no Signature.	G 1 Sharp. e 1 Sharp.
2d series.	C no Signature. a no Signature.	G 1 Sharp. e 1 Sharp.	D 2 Sharps. b 2 Sharps.
3d series.	G 1 Sharp. e 1 Sharp.	D 2 Sharps. b 2 Sharps.	A 3 Sharps. f♯ 3 Sharps.
4th series.	D 2 Sharps. b 2 Sharps.	A 3 Sharps. f♯ 3 Sharps.	E 4 Sharps. c♯ 4 Sharps.
5th series.	A 3 Sharps. f♯ 3 Sharps.	E 4 Sharps. c♯ 4 Sharps.	B 5 Sharps. g♯ 5 Sharps.
6th series.	E 4 Sharps. c♯ 4 Sharps.	B 5 Sharps. g♯ 5 Sharps.	F♯ 6 Sharps. d♯ 6 Sharps.
7th Series.	B 5 Sharps.	F♯ 6 Sharps.	C♯ 7 Sharps.
Enharmonic.	g♯ 5 Sharps. C♭ 7 Flats. a♭ 7 Flats.	d♯ 6 Sharps. G♭ 6 Flats. e♭ 6 Flats.	a♯ 7 Sharps. D♭ 5 Flats. b♭ 5 Flats.
8th series.	G♭ 6 Flats. e♭ 6 Flats.	D♭ 5 Flats. b♭ 5 Flats.	A♭ 4 Flats. f 4 Flats.
9th series.	D♭ 5 Flats. b♭ 5 Flats.	A♭ 4 Flats. f 4 Flats.	E♭ 3 Flats. c 3 Flats.
10th series.	A♭ 4 Flats. f 4 Flats.	E♭ 3 Flats. c 3 Flats.	B♭ 2 Flats. g 2 Flats.
11th series.	E♭ 3 Flats. c 3 Flats.	B♭ 2 Flats. g 2 Flats.	F 1 Flat. d 1 Flat.
12th series.	B♭ 2 Flats. g 2 Flats.	F 1 Flat. d 1 Flat.	C no Signature. a no Signature.

In Ex. 103 the first of these series is worked out; from this model play all the remaining series until any one of them can be played at call without hesitation. In order to do this with the least expenditure of effort, the following directions should be explicitly followed. Notice that each series contains a modulation from a tonic key to its dominant and sub-dominant keys with the relative minor of each: Memorize each series from this point of view. Notice that the chord succession is the same in each modulation. Notice that the chord positions are the same in the corresponding measures of each modnlation. In order to keep the parts for the two hands in the same relative position to each other when playing Ex. 103 in other keys it will be only necessary to see that the soprano and bass of the first chord are the same distance apart as in the model, and to move the parts the same distance and in the same direction as in the model when going from one division to the next. The practical point sought for through this exercise is the ability to recognize, instantly, the modulations and the chords in any and all of the series.

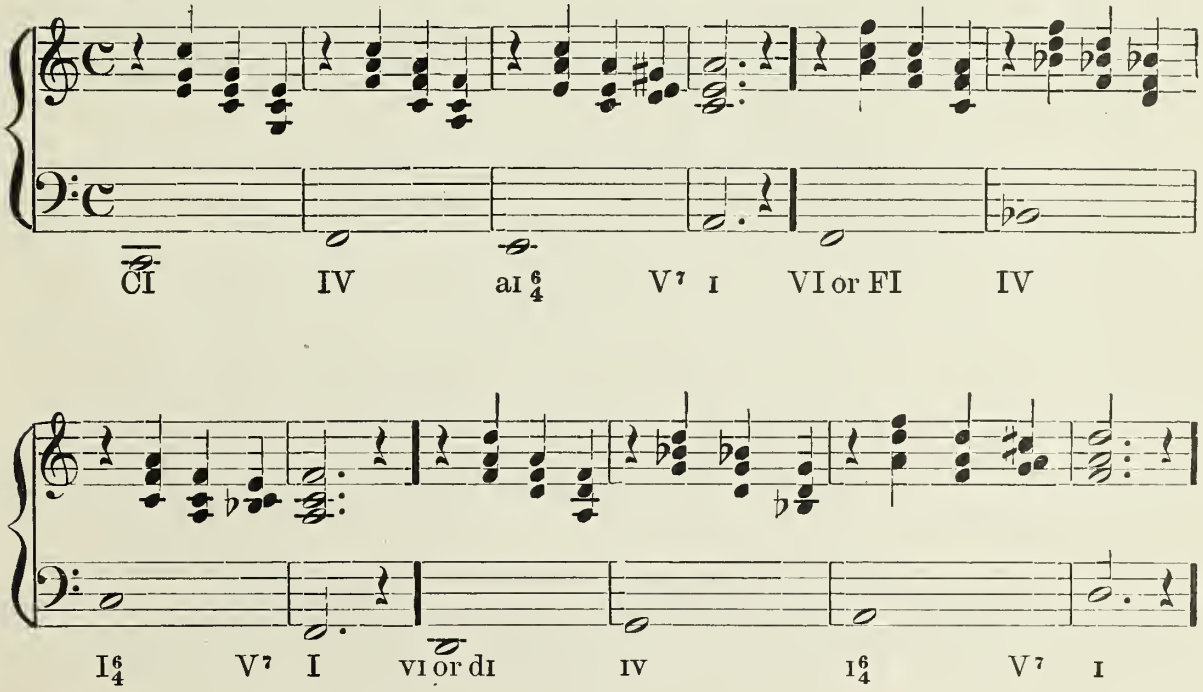
LESSON LVI.

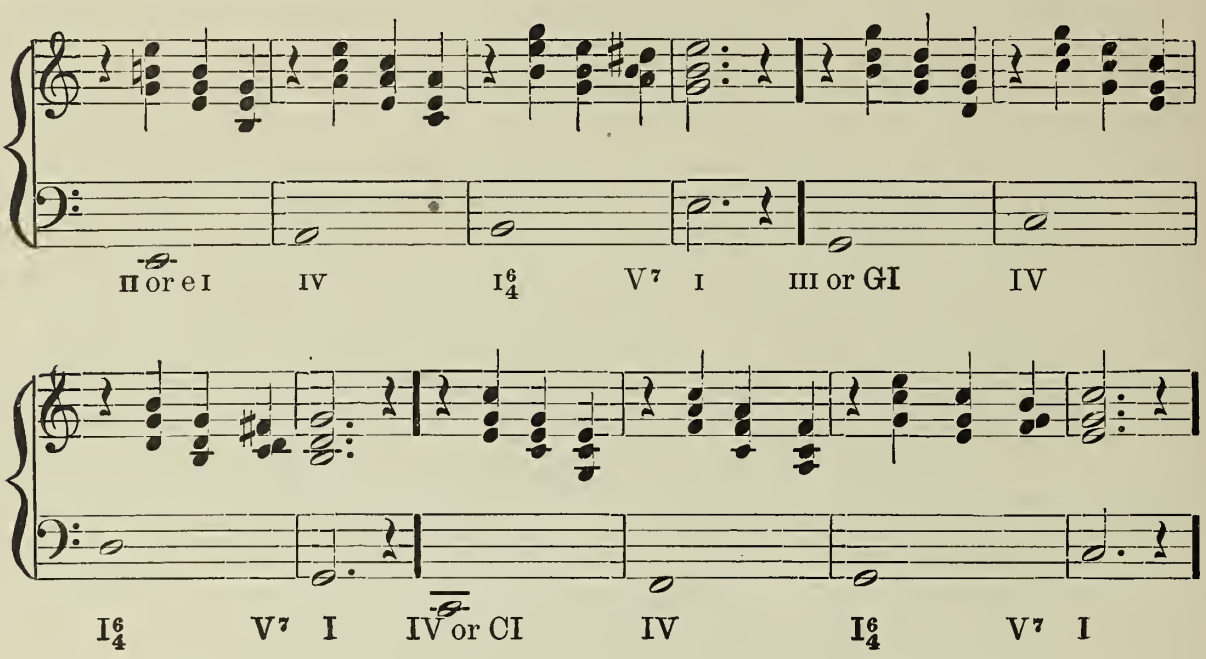
The Same Subject Continued.

On account of the great importance of the practical points to be gained through the study of Ex. 103 and the accompanying diagram, another lesson will be devoted to it. After Ex. 103 has been practiced in every series on the diagram, it should be carefully written out in every series once at least and more than once in the more uncommon keys found in the series 6, 7 & 8. If this study be well mastered all future musical problems will be mnch simplified.

Modulation to the Next-related Key.

Ex. 103.





LESSON LVII.

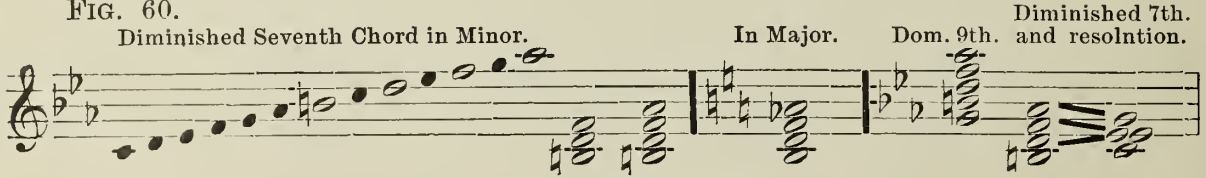
Modulation by Change of Mode, the Diminished Seventh Chord.

The subject of modulation by change of mode was touched upon in Lesson XLIX; what was there laid down should be read again at this point. By merely changing the mode a composition may be brought into proximity to many distant keys. (Those which posses few tones in common). If in Ex. 103 the first modulation be changed from a-minor to A-major the 1st. series of keys (see diagram) is brought into connection with those of the 3d, 4th. and 5th. series. If the change be made in the second modulation from F-major to f-minor the 1st. series is brought into connection with 8th., 9th. and 10th. series, etc. Practice such changes as these until great facility is acquired.

The Diminished Seventh Chord.

The diminished seventh chord, like the interval with the same name, (see Lesson XXXIX) is founded on the leading-tone of the minor scale: It is formed by the addition of another minor third to the diminished triad: All its intervals are alike; viz. its thirds are all minor and its fifths are all diminished, on this account it is easily manipulated and, as it resolves as readily to major as to minor, it is often used as a very convenient means of modulation. It is, in reality, a part of the dominant harmony, and when used with the dominant it forms the chord of the dominant ninth.

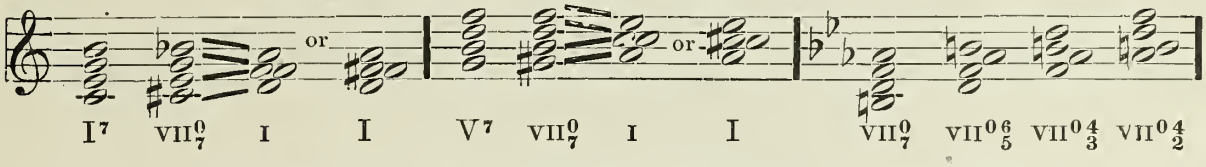
FIG. 60.



The diminished seventh chord is also subject to the usual inversions; it is markes thus: VII^{0}_{7}

FIG. 61.

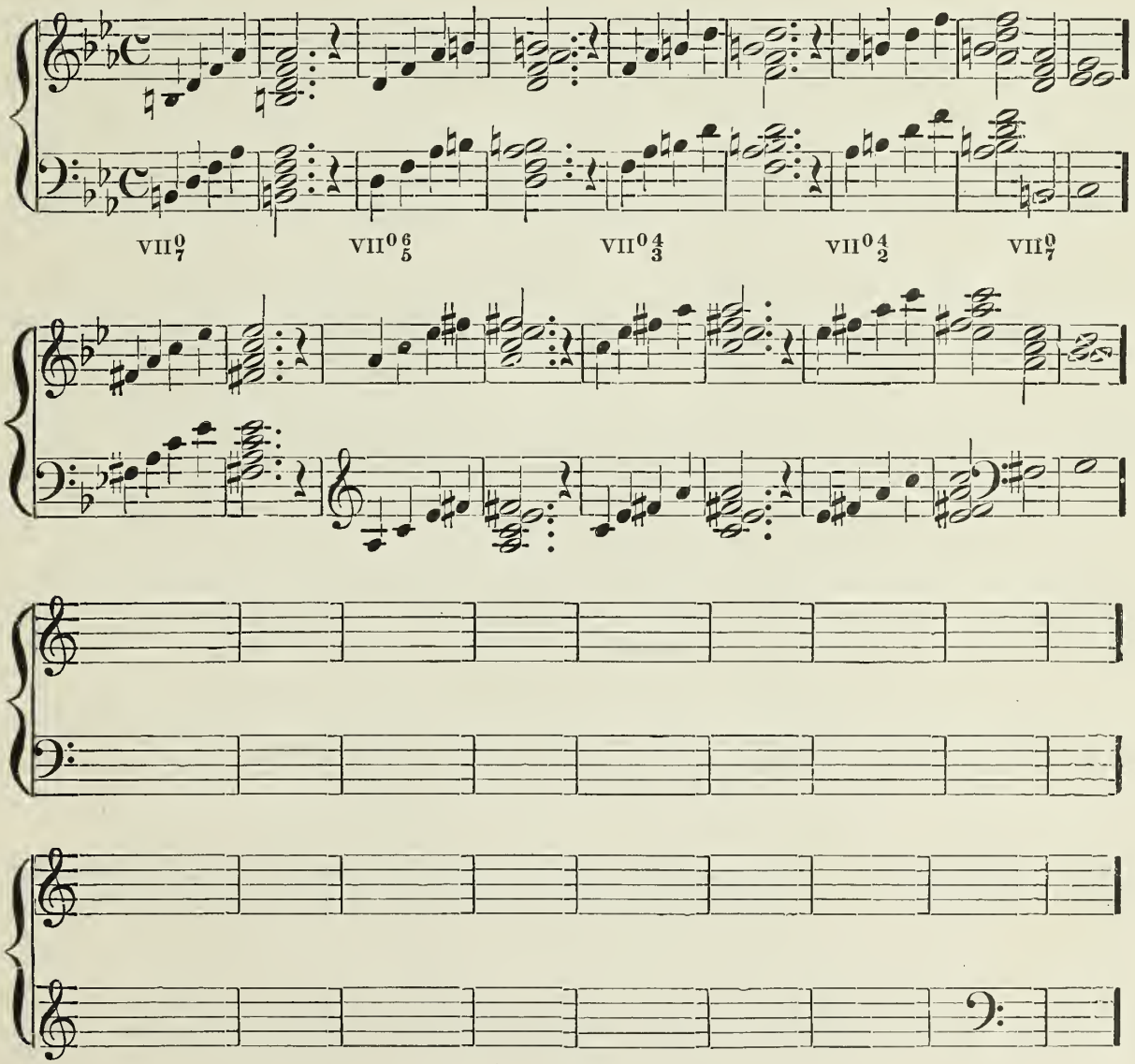
Maj. 7th. to Dim. 7th. and resolution. Min. 7th. to Dim. 7th. and resolution. Dim. 7th. and Inversions.

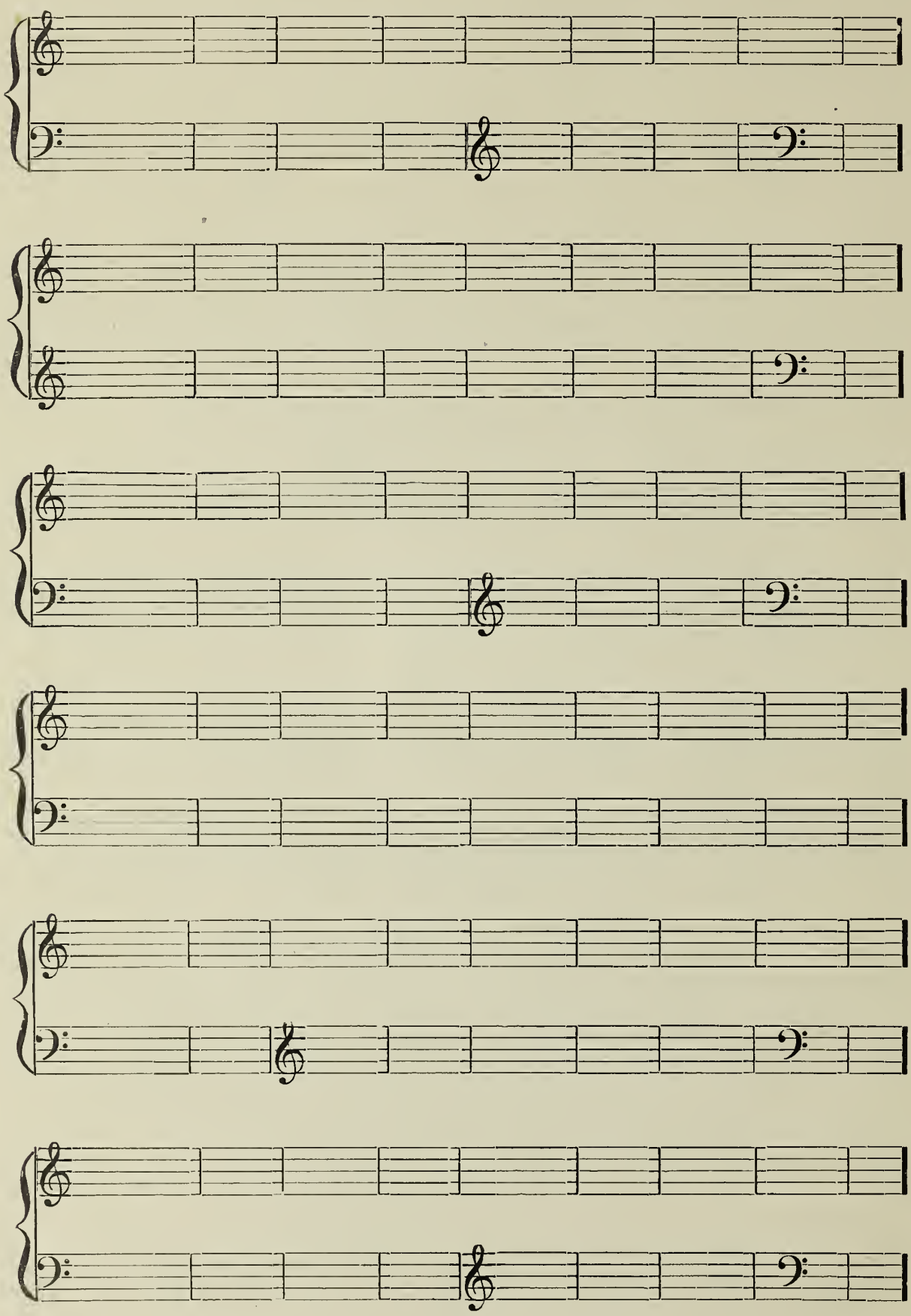


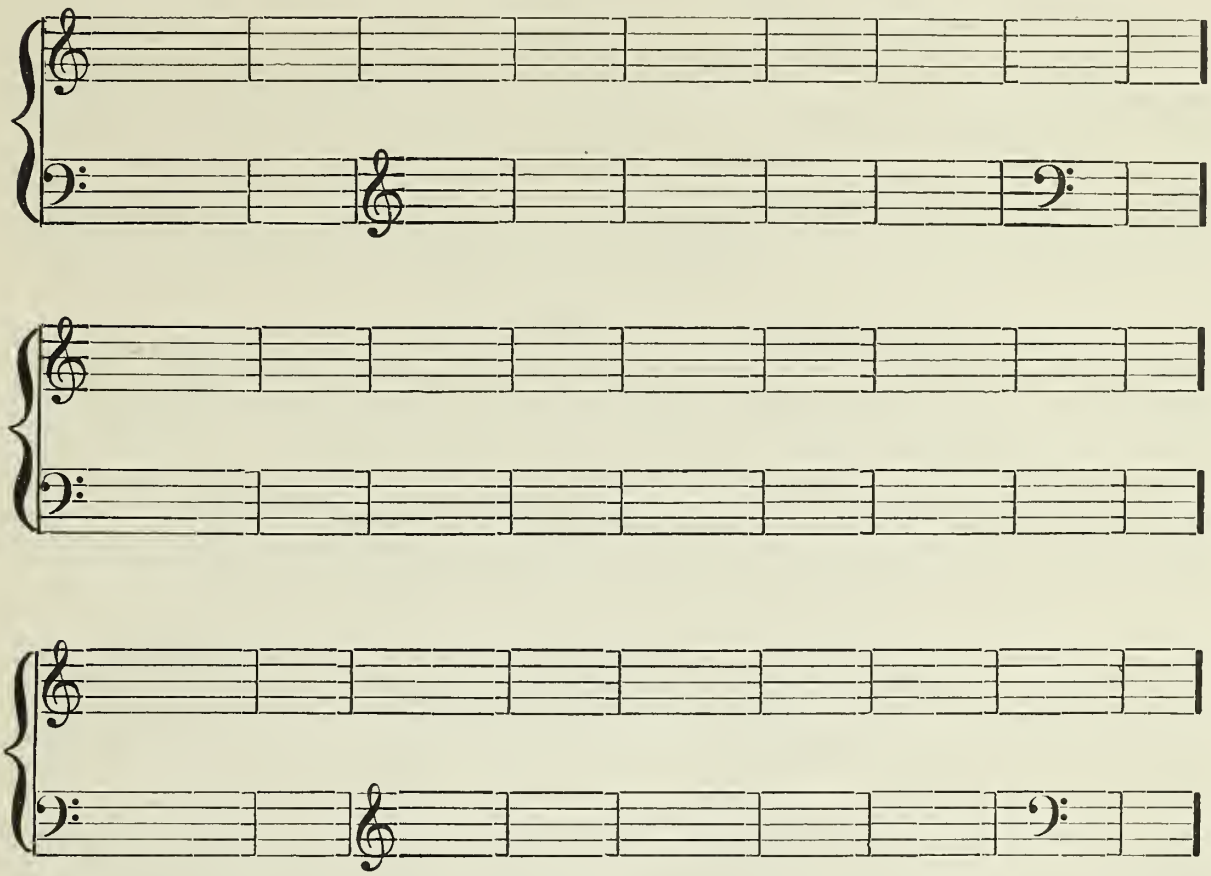
Ex. 104 shows the chord of the diminished seventh and its inversions. Fill out the incomplete measures with care and mark the chords with the proper mumerals. Memorize the root and seventh of each chord, as it is by these that the chord is to be recognized when it is introduced chromatically as is very often the case. Play it until it is memorized, and sing those divisions which are within the compass of the voice.

The Diminished Seventh Chord and Inversions.

Ex. 104.



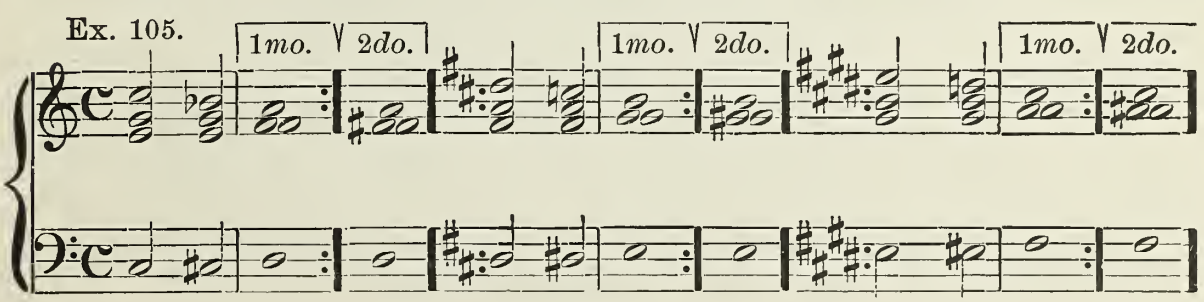


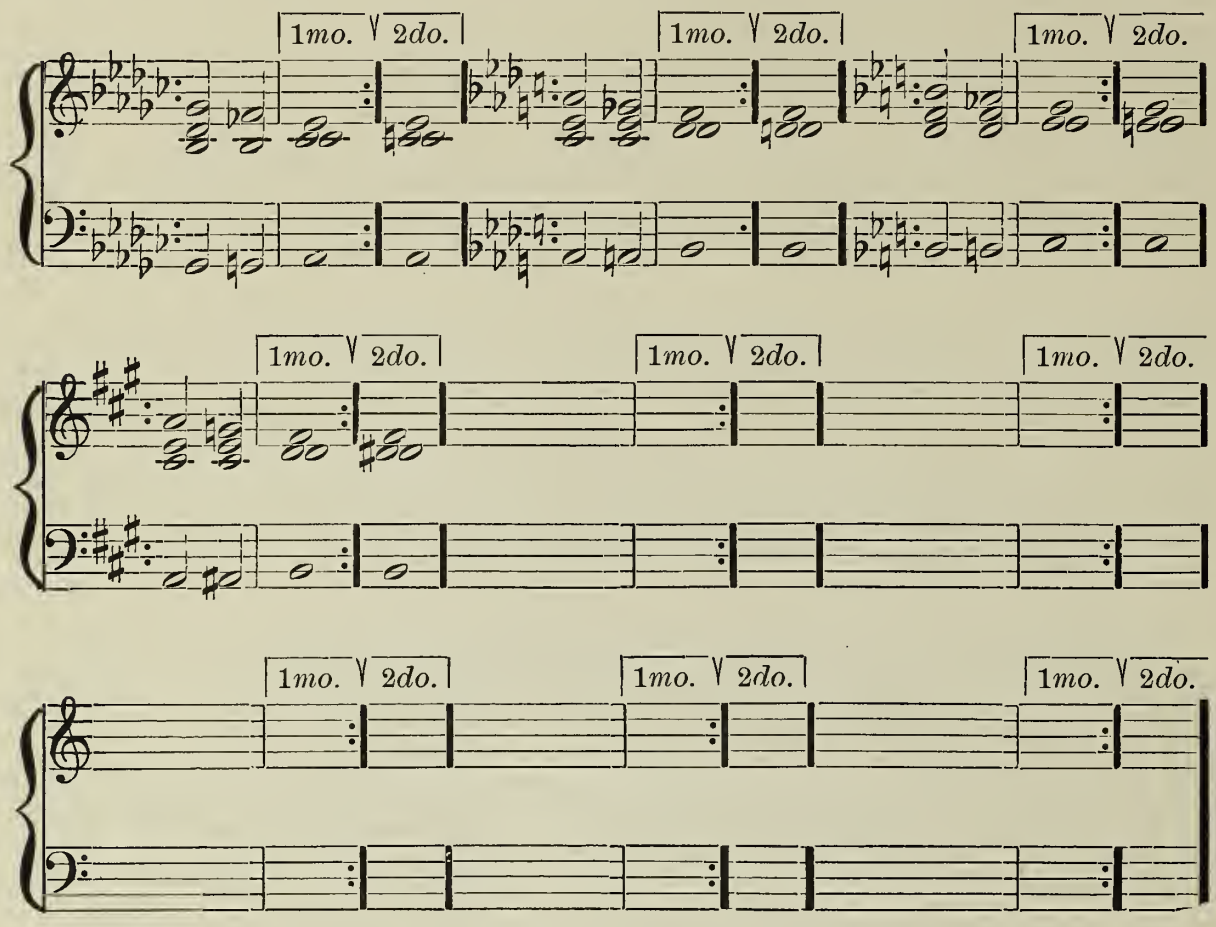


Ex. 105 shows the diminished seventh chord as a means of modulation: Analyze the chords and mark them with the proper letters and numerals; fill out the incomplete measures, making the enharmonic change from C♯ to D♭ at the proper time: Play it until any of these chords can be given without hesitation. Alternate the formulas in Ex's. 103 & 105 until either can be given at call. There are many other devices for modulation which will be fully elaborated in the department of harmony; the object of the foregoing study is to gain an accurate acquaintance with chords and with the signs of modulation, without which any real facility in sight-reading is an impossibility. Analyze and sing Ex. 182 Sol. Bk. 2, using great care as to the intonation of the fifths in the alternate measures.

The Diminished Seventh Chord and its Resolution.

Ex. 105.





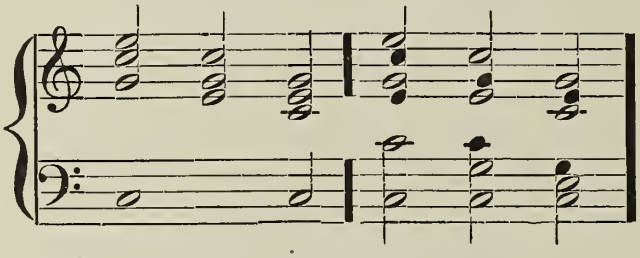
LESSON LVIII.

Chords in open Harmony, Nonharmonic Tones.

The previous studies have contained chords in close position only; viz. with the three upper voices as close together as is possible in contrast to open harmony, a more dispersed arrangment of the same voices between which other members of the same chord may be written.

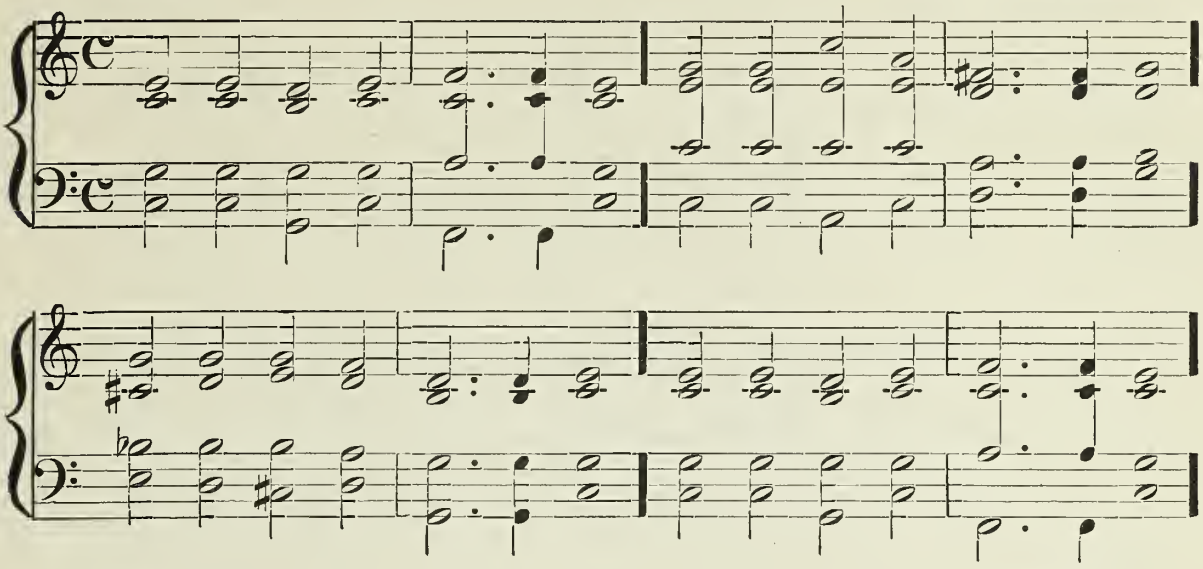
Close Harmony. Open Harmony.

FIG. 61.

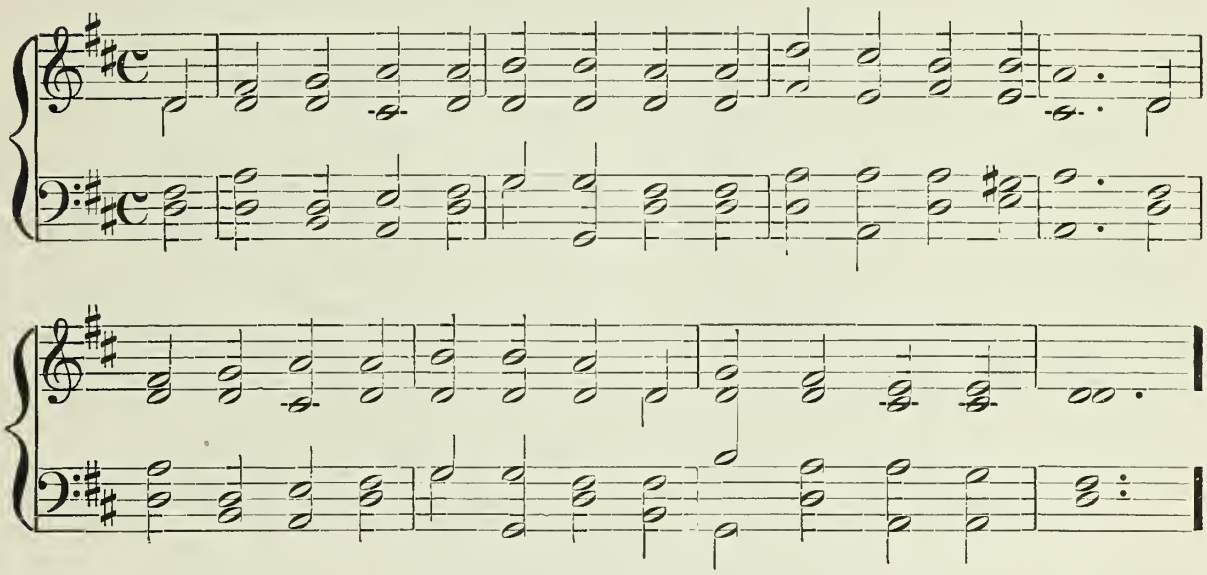


The following selections introduce both varieties in order to furnish practice in recognizing chords which are so written. Analyze the chord structure as rapidly as possible, giving the name of the chord and its form, if it is inverted; point out the chords which are in open harmony; play them many times in several keys; sing the parts which are written within the compass of the voice.

Ex. 106. RICHARD REDHEAD.

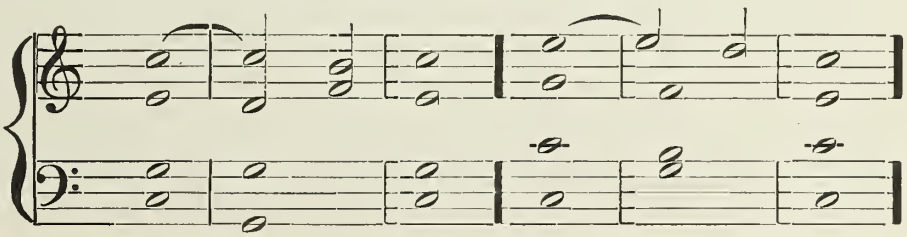


Ex. 107. GERMAN.



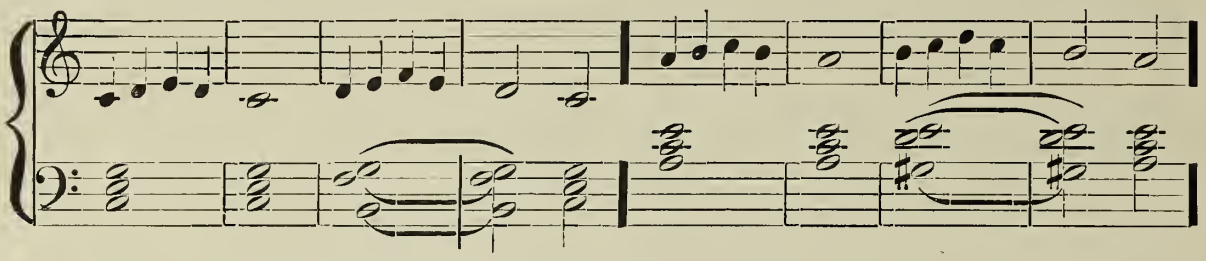
Nonharmonic tones are those which are foreign to the chords in which they appear; there are several varieties only two of which will be touched upon here; the Passing-note and the Suspension. Such tones are invariably a step higher or lower than the legitimate member of the chord. The Suspension is a note which has appeared in a chord of which it is a member and which is held over, "suspended," into a chord of which it is not a member; the discord thus produced must be immediately resolved by allowing the suspension to progress into the consonant note which, for the moment, it has displaced.

FIG. 63.



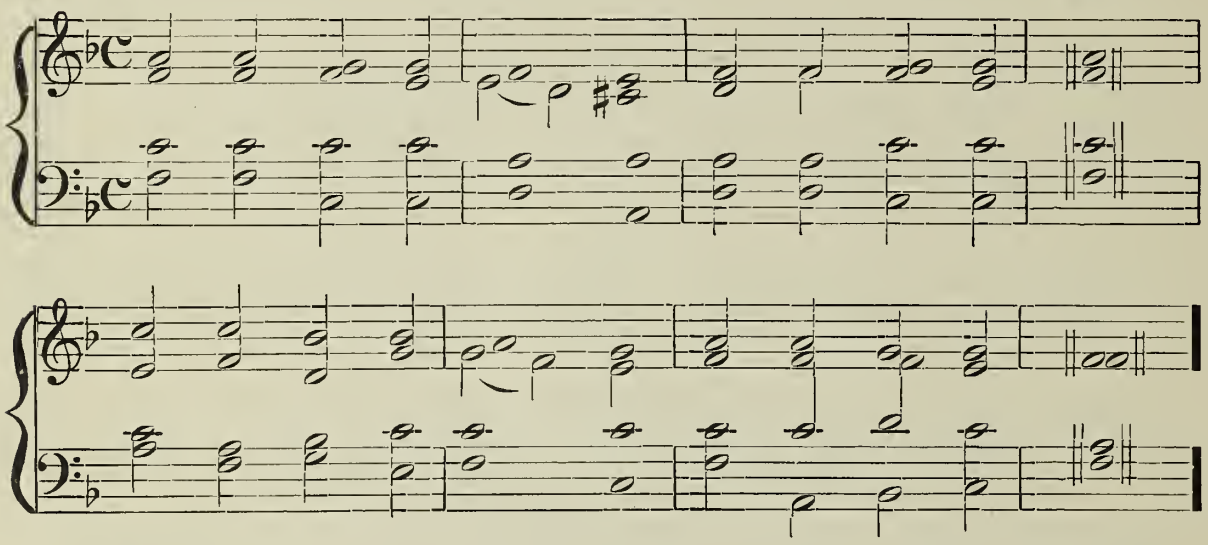
Passing tones are also those which are foreign to the harmony. They occur on the unaccented part of a measure in passing from one tone of a chord to another.

FIG. 63.

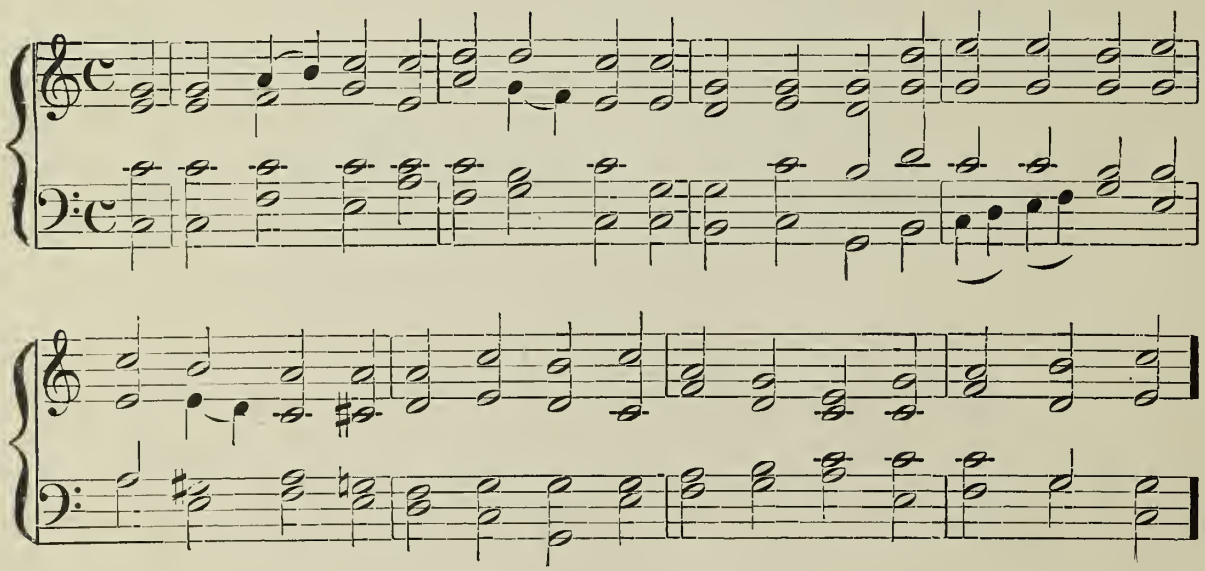


The following selections contain illustrations of both the suspension and passing-note; point these out when analyzing and strive to make the analysis as rapid as possible. Sing the parts which come within the compass of the voice; play them as they are written and in several other keys.

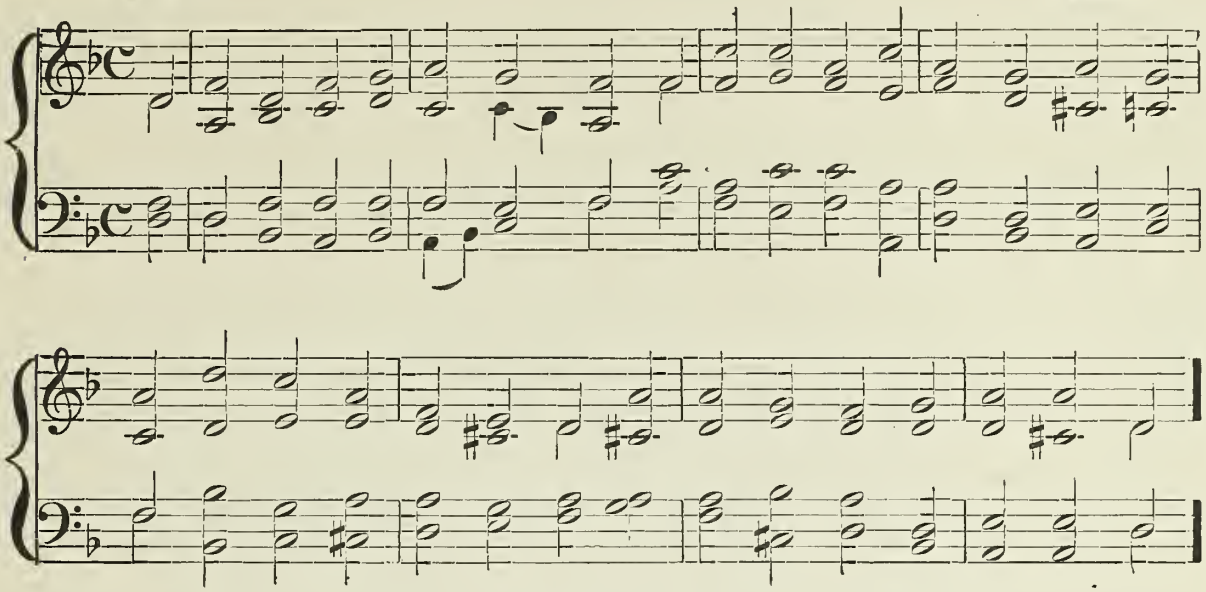
EX. 108. GERMAN.



EX. 109. WILLIAM H. MONK.



Ex. 110. GERMAN.

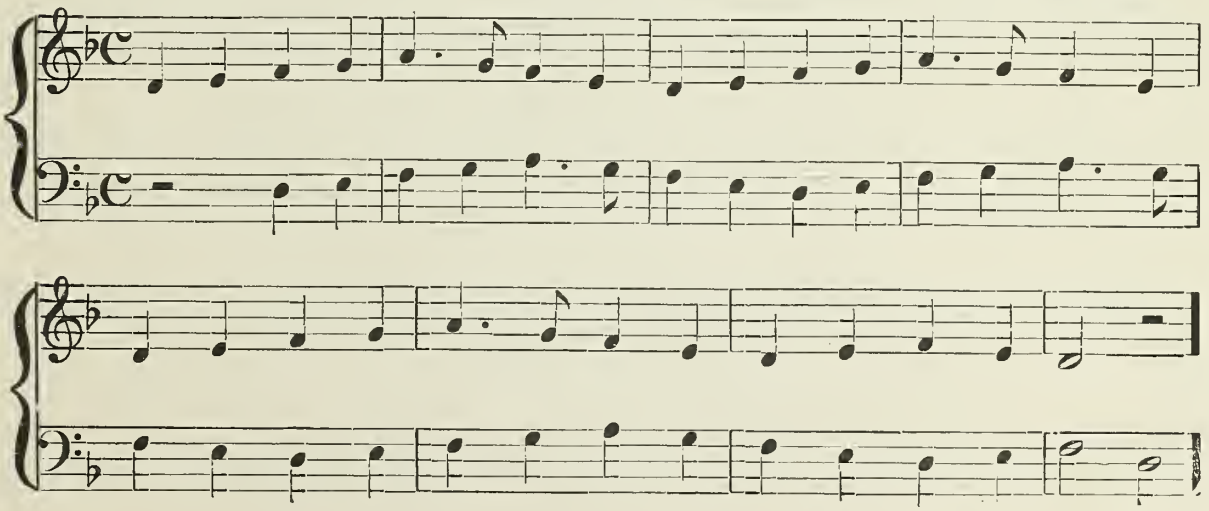


LESSON LIX.

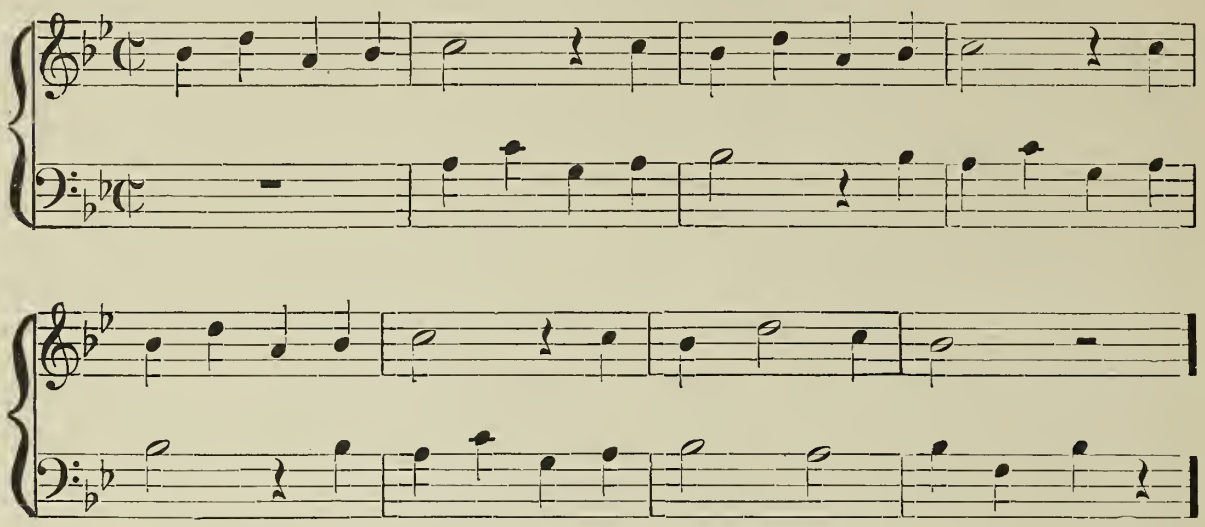
Melodic Transposition.

Transposition may be said to be of two kinds, chordal or melodic; the preceding lessons have laid particular emphasis on the former variety, and the drill has consisted of the recognition of chords and their transposition from the key in which they are written to many other keys. This form of transposition has particular application to music in which the chordal element predominates. Melodic transposition has reference to music in which the melodic element predominates, wherein the composer chooses a melody for a theme and the other voices imitate, to a greater or lesser degree, this theme. In the following selections all the voices repeat the theme at the distance of an octave or of some other interval; think of the numbers represented by each note, and play them *always* in some other key than that in which they are written; sing them also with one or two voices on each part.

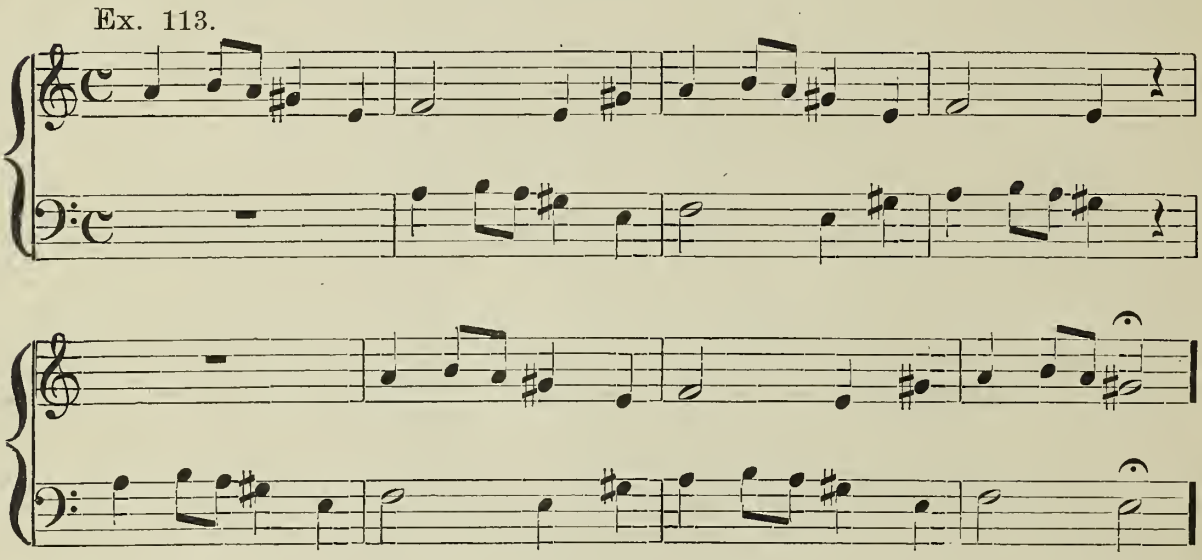
Ex. 111. CANONS. KONRAD M. KUNZ.



Ex. 112.



Ex. 113.



Ex. 114.